BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. LIII.] LONDON: SATURDAY, JANUARY 2, 1858. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

SALOP INFIRMARY.

EFFECTS OF SACCHARINE DIET IN DIABETES.

By Edward BURD, M.B. and L.M.Cantab., Physician to the Infirmary.

JUST at the present time, when there is some discussion and much difference of opinion, as to the effects of a saccharine treatment of diabetes, the following case may not be uninteresting. I will merely give a few of the principal details, which touch more particularly on the point at issue.

M. M., aged 30, married, came under my care in the Salop Infirmary, on November 14th, 1857, suffering from diabetes mellitus in an advanced stage. She is one of a healthy family, and resides in a healthy village in North Wales, where she has been under regular medical attendance for some months. She is extremely emaciated, and in a very weak and depressed state, both of mind and body. She has had nine children, and says that she was quite well up to the period of her last confinement, ten months ago, at which she had considerable hæmorrhage, causing great weakness and prostration, which rendered her unable to nurse her child. She has menstruated twice since her confinement, but not during the last seven months, from which period she dates her illness, and from which she has been known to be suffering from diabetes, and has been treated accordingly. The disease has, however, steadily progressed in spite of remedies. On her admission, she weighed seventy-nine pounds, and was passing six quarts of urine in twenty-four hours, of specific gravity 1036. I ordered her to take two pints of milk and two pints of porter daily, with sick diet and no medicine. This plan she continued for a week, seemingly somewhat improved by the liberality of her diet; and on November 22nd (a week after her admission), I determined to try the effects of a saccharine treatment. She was ordered to go on with the sick diet, milk, and porter, and to take half a pound of honey and half a pound of white sugar daily. She rather liked the idea of this novel treatment, and commenced it willingly.

From the very first commencement, however, she became daily worse in every way; the pulse, before very quick, became quicker; the thirst more urgent; the tongue more dry; the urine increased both in quantity and in specific gravity. Sickness came on; and the bowels became very relaxed. She lost all desire for food; had restless, bad nights; and her debility became extreme—so much so, that her evacuations were passed involuntarily: and I entertained great fears that she would rapidly sink. These untoward symptoms were met, as they arose, by appropriate remedies, but in vain; and at the end of a week, it was found necessary to stop the supply of sugar. The quantity of the urine had during the week risen from six quarts *per diem* to twelve; the diarrhœa at the same time being excessive. Under the free use of opium and stimulants (the sugar being omitted), she rapidly improved, and in the course of another week was able again to get up and to walk about her ward, the urine having again reduced to six quarts.

REMARKS. Had this saccharine treatment been continued in this case for a few days longer, the woman would inevitably have died, and died from the effects of the treatment. Happily, such an event did not happen, and she is spared; though to drag on a miserable existence, and sooner or later to become the victim of a protracted disease, having barely escaped immolation on the altar of experiment.

ST. GEORGE'S HOSPITAL.

I. EPILEPSY: ARACHNITIS.

[*Communicated by* G. GODDARD ROGERS, M.D., *Medical Registrar.*]

C. O., aged 35, a shoemaker, had a fit a week ago when in the street. It was preceded by giddiness and swimming in the head, and left him unconscious for an hour; those who witnessed it say that he struggled violently. In two days he was better; but in the course of another eight and forty hours violent pain attacked the back of his head, and of this he complained when admitted on the 30th of November. His wife stated that he had also been suffering from pain in the left ear; and (with a view of applying counterirritation, I suppose) she had poured brandy and cayenne pepper into it!

His tongue was somewhat coated with a brown fur; pulse 100, and weak; the pupils were dilated, and he saw almost everything double. His skin was moist; the urine was high-coloured and acid, with a specific gravity of 1034, and loaded with albumen. Under the microscope it exhibited an abundance of well marked semitransparent granular casts of all sizes. He made some complaint of the urine scalding him when voided. A dose of calomel and senna, followed by lotions to the head and a blister to the neck, was the treatment employed. On the following day a mixture containing ammonia was given. The pain in the head appeared most severe quite at the lowest part of the occipital region.

December 2nd. In the forenoon he was delirious. Great dilatation of the pupils was noticed, and a peculiar rapid oscillatory movement of both eyeballs, together with some rigidity of the muscles at the back of the neck. At night he was violent and much exhausted, in consequence of the repeated attempts he made to leave his bed. Towards early morning he lay quiet, but groaned as if in great suffering, and the nurse reported that he died "very hard."

The body was examined twelve hours afterwards. The vessels of the pia mater were much congested. The dura mater and arachnoid cavity were natural. There was a considerable deposit of lymph mixed with pus in the subarachnoid tissue at the vertex of the brain on both sides of the longitudinal fissure, and at the base in the subarachnoid space corresponding to the third ventricle. The cavities of the lateral, third, and fourth ventricles were full of turbid fluid mixed with lymph, and their lining membrane was very vascular. The septum lucidum, fornix, and central structures were softened. The kidneys and liver were healthy. The other organs were not examined.

II. PLEURITIC EFFUSION: PNEUMOTHORAX: PARACENTESIS: DEATH.

[*Communicated by* G. G. ROGERS, M.D., *Medical Registrar.*]

H. C., aged 30, a potman, was admitted on November 19th, suffering from cough and dyspnœa. He stated that a fortnight before he was chilled by going out in the rain; that severe cold and cough followed, and that the night before his admission he was attacked with sharp pain in the right side. His breathing was very short and hurried; the heart's action increased; the pulse 116, full, and rather sharp and hard; the skin was hot; and he was afraid to cough or expectorate. Turpentine epithems were applied, and calomel and opium given three times a-day. Over the back of the left lung, at its lower part, was some dulness on percussion and fine crepitation. On the right side on succussion a loud splashing was heard.

November 20th. His face was very blue; there was the same urgent dyspnœa, and he lay constantly on his back.

November 22nd. He was extremely weak; and towards evening he became so exhausted that it appeared unlikely he would survive the night. This condition of prostration recurred the following evening, and was succeeded by long-continued delirium. In the morning he was calmer, but breathed with very great difficulty; and he remained much the same

until the 28th, when at 2 P.M. he grew so much worse that, after some consultation, as a *dernier ressort*, a fine trocar and canula were introduced into the right pleura by Mr. Pollock. The canula was suffered to remain in the wound quite half an hour, and about seven ounces of greenish serum drained off. Subsequently fluid continued to ooze, until a total of sixteen ounces had flowed out. At 5 P.M. he expressed himself easier, and certainly his respiration was less impeded; and during the 29th he was cheerful, until delirium came on at night. He gradually sank, and died on December the 1st.

The examination was made thirty-six hours later. The trocar had passed far back in the seventh intercostal space. There were a few tubercles at the apex of the left lung. On cutting into the cavity of the right pleura, a considerable quantity of air made its escape. The cavity was much enlarged, its lower part contained some serum, and a large quantity of recently effused lymph was spread over the pleural surface of the lung, especially below. Towards the posterior part of the upper lobe the pleura was perforated by a hole nearly of the size of a fourpenny piece. This was found to correspond to a small vomica, which lay close to the surface of the lung in this position. There were two or three other small vomicæ in this lung, and a tolerably copious deposit of crude tubercle. The lower part of the organ was consolidated by pressure, and sank in water. There was a considerable deposit of tubercle in the liver, which weighed 4lb. 12oz. The kidneys were lobulated, large, and coarse. The spleen was softened. There was no ulceration of the larynx or intestines.

Remarks. Although in pneumothorax the prognosis, on perforation of the pleura occurring, must depend on the state of the opposite lung, and must be favourable or otherwise accordingly, yet in acute phthisis, more especially should extreme distress of breathing occur, it may be very advisable to puncture the thoracic parietes, thus relieving the patient from imminent danger, and possibly prolonging life for a few hours or even days, a matter which is sometimes of the utmost importance in private practice. Viewed under this aspect, the results in the present case may afford the practitioner ground for less hesitation in plunging a *small* trocar into the chest, although only temporary ease can be given.

III. GLOSSITIS.

Under the care of W. E. Page, M.D.Oxon.

[*Communicated by* G. G. Rogers, M.D., *Medical Registrar.*]

C. G., aged 40, a groom, was attacked with face-ache on November 26th, and on the 27th found difficulty in articulating. There was no soreness of the throat, but pain at the angles of the lower jaw, and a feeling of fulness in the throat. On the morning of the 28th his tongue swelled, and became very painful. He stated that a cat bit him in the palm of the hand on the 22nd, and that he sucked the wound, and to this he chose to attribute all his symptoms. His pulse was 76, and quiet; bowels open. The tongue was much swollen and painful, and filled the mouth so that it could not be protruded, and it was covered with thick mucus. There was intense pain on the left side of the face, around the ear, and over the temple; the submaxillary gland was also swollen and tender. He was ordered to use an inhaler; beef tea was given; and he took every six hours acetate of ammonia draught with antimony and nitric ether.

November 29th. Mr. Hawkins made a deep incision along the left side of the tongue where the swelling was most marked. The wound bled freely, and relieved him. In the course of the day two three-grain doses of calomel were given.

November 30th. The tongue was again freely incised, and five grains of calomel given, followed by a senna draught.

December 1st. A great quantity of dead cellular membrane covered the surface of the tongue. Underneath this the incisions were healing rapidly. The swelling had diminished, but he could still swallow fluids only.

December 5th. He was able to partake of solid food, and he left the hospital on the 9th quite recovered.

Remarks. True idiopathic glossitis is of sufficiently rare occurrence in our hospitals to render every case coming under notice worthy of record. That this was such an one there can be no doubt, although at first, from the pain at the back of the fauces, and in the submaxillary regions, Mr. Hawkins was inclined to look upon the case as originating in some form of diphtheritis. But the manner in which the inflammation yielded to the treatment led to the abandonment of this view. It is the opinion of some that it is impossible to have glossitis without inflammation of the adjacent mucous or submucous structures, but this has not been an accompaniment in our medical wards; and Mr. Hewett tells me that amongst his surgical patients he has by no means as a rule found the two to coexist. Where they do the whole disorder may generally be traced to irritation from ptyalism.

In connection with this subject, and as illustrating the benefits which result from free incision, I may mention the following case which occurred in my father's practice during the past summer.

A young woman put into her mouth a piece of bread in which a wasp was concealed. Although the attendance was immediate, very great swelling and inflammation of the tongue had at once been set up. The whole neck and chest were as red as in a person suffering from scarlatina; there was extreme pain, and inability to swallow or articulate. The tongue was freely scarified, giving instant relief; an opiate was administered; and rapid recovery followed.

Original Communications.

ON DISEASES OF JOINTS.

By Holmes Coote, Esq., F.R.C.S., Assistant-Surgeon to St. Bartholomew's Hospital, and to the Royal Orthopædic Hospital, etc.

I. REMARKS ON THE OPERATION OF RESECTION OF THE HEAD OF THE FEMUR.

I performed, in the month of September 1857, at St. Bartholomew's Hospital, the operation of resection of the head of the femur on a pallid and emaciated boy, who had been suffering from disease of the hip, of two years duration, followed by dislocation of the head of the bone into the sacro-sciatic notch; the formation of numerous abscesses, which had left profusely discharging fistulous passages; permanent flexure of the femur on the pelvis to more than a right angle; and great distortion of the spine. The particulars of the case have already appeared in the pages of another Journal where it has been correctly recorded as one of the successful instances of the performance of this operation; and so, indeed, it may be termed; for the patient has since improved in health, the fistulous passages have healed up, the limb is coming into its proper position, and the curvature of the spine is lessened. But I write this to record a protest against the very operation which I have performed, being convinced that very many of the evils ensuing from hip-disease, especially in young subjects, and nearly all those which are supposed to indicate the propriety of resection of the head of the femur, are due to pressure and friction between the opposed ulcerating articular surfaces, which, by the application of proper instruments, and by a due appreciation of the value of patience, admit of removal more often than is supposed. And here I may remark, that surgeons would do well to study again the anatomy of joints, and the signification of the different ligaments. The researches of the Webers have not received due attention; nor have many subsequent monographs been read. It will not be generally believed that the thigh cannot be bent backwards on the pelvis—that it is immovably fixed when it falls in a straight line corresponding with the axis of the trunk. When the lower extremity is thrown backwards, as in the act of kicking, the movement is between the pelvis and the lumbar vertebræ. Nor does the thigh admit of much rotation outwards, the ilio-femoral ligament restraining motion in that direction. When the limb is extended on the pelvis, the articulating surfaces are firmly pressed together; but when the thigh is bent forwards on the pelvis, and the limb is inverted and adducted, the articulating surfaces are held loosely together; and the movements are unchecked, inasmuch as the posterior part of the capsule has no direct attachment to the femur, but forms a loose fold, like an orbicular ligament. How often do we read of bending backwards the thigh on the pelvis—of its free range of external rotation! How commonly is extension—*i. e.*, bringing the limb to the straight line with the trunk—practised in surgery! The first two movements are impossible without rupture of the capsular ligament: the last amounts to absolute cruelty to a patient suffering from ulceration of the bone.

To return to the operation of resection of the head of the femur:

The success which I have met with in the case above alluded to gives me no desire to repeat the operation; for more mature reflection and experience, combined with re-examination of pathological specimens, have led me to conclude that many of the morbid changes, and still more of the attendant suffering, are due to the imperfect carrying out of some of the most obvious and simple principles of treatment; namely, the proper application of warmth, perfect immobility of the limb, and relief of the articulating surfaces from friction and pressure. Moreover, when the head of the bone is exciting ulceration in the acetabulum, or pain and disease, after dislocation, in the neighbouring soft parts, the symptoms may be arrested, the limb may be brought into place, and the patient's health greatly improved by the application of an apparatus for extension—not forced or sudden, but slowly acting, and capable of direction in whatever way will draw asunder ulcerating and highly sensitive surfaces.

I shall be told that these principles of treatment have been long attended to. But I may question that fact. How many children, with incipient disease of the hip, have none other than their usual clothing? How often is it that the limb, somewhat colder than the opposite, has no flannel roller, nor the covering of leather or gutta percha over the joint? As for the repose of the limb, the child is daily taken from its bed to be washed and dressed, to pass its evacuations; and, among the poor, this movement goes on to a far greater extent.

I directed attention to these points in an article on Disease of Joints, which appeared in the *British and Foreign Medico-Chirurgical Review* in 1855; and I have seen no reason to change the opinion there expressed, that these points "merit, in their more complete and scientific application, greater general attention than they have hitherto received in this country."

I have not the space to enter minutely into the morbid changes in hip-disease of young subjects, concerning the origin of which so much has been written; nor to quote the opinion of those who, on the one side, say it is originally an inflammatory affection of the synovial membrane, or, on the other, that it commences in the cancellous texture of the bones. Pathological investigation shows that, however analogous the constitutional peculiarity may be in all cases, the disease does not always begin in the same way. In many cases, the inflammation of the synovial membrane goes hand in hand with a similar process in the spongy texture of the bones composing the joint; there are others in which the latter morbid changes are either absent or exist in a very slight degree. The destruction of the ligamentum teres, the exudation of pus in the bones, the ulceration of the cartilage, the separation of the epiphysis, are stages familiar to all; but the point to which I would direct attention is the following—that the more serious changes seem in great measure due to the rubbing of the ulcerated body surfaces—a process which keeps up the morbid action which is often the precursor of fatal accidents. How comes it that we sometimes find the base of the acetabulum perforated, with the head of the femur impacted in the hole (Museum of Royal College of Surgeons, No. 940); or separation of the three imperfectly united bony elements of the acetabulum, the ilium, ischium, and pubis? Is it probable that the matter, which in McDowel's case communicated with the small intestine and external iliac artery, and in R. Adams' case found its way into the vena cava inferior, would have made a passage into the abdominal cavity, had the head of the femur been prevented from rubbing against and ulcerating the acetabulum? I cannot but think that, if care to prevent these accidents be not taken, the patient is spared some risks by the actual dislocation of the bone from its articular cavity. Preparations are to be seen in the Museum of St. Bartholomew's Hospital, where the shaft of the femur had been slowly driven into a cavity in the cancellous texture of the ilium, near to the acetabulum.

The instrument in use at the Royal Orthopædic Hospital for slowly drawing the femur, when dislocated, to its proper place, or for keeping up slow extension, combined with immobility of the limb, when the head of the bone still remains in the articular cavity, is described in Mr. Tamplin's work on *Deformities*, p. 38; or may be seen at the maker's, Mr. Fergusson, of Gilt-spur Street. It is fixed to the pelvis, and attached by a broad webbing strap to the abdomen. From this a steel bar passes down the outer part of the thigh, where it is fixed by a broad leather strap. Three screws at the junction of the steel bar with the pelvic band allow of three movements—1. Flexure; 2. Abduction; 3. Elongation. "The foot, leg, thigh, and hip, must first be bandaged with a flannel roller; for, unless the natural temperature is kept up, the restorative process cannot go on." (Tamplin, *On Deformities*, p. 185.)

I will add, in conclusion, that this treatment may be daily seen in practice in the Royal Orthopædic Hospital; and that I should indisputably try it, not for weeks, nor even months, but for years, if possible, before resorting again to so serious an operation as resection of the hip-joint, which, however successful in its issue, leaves the patient in a crippled state for at least an equal period of time, and which likewise shows, in a large proportion of cases, a fatal result.

NOTES ON SEA-SICKNESS: ITS CAUSE AND ITS REMEDIES.

By J. C. Neild, M.D., Riversdale, New Plymouth, New Zealand.

The following notes were made during a sailing voyage to New Zealand, *viâ* the Cape of Good Hope, from June to September 1853, and occupying eighty-eight days from shore to shore.

From observations during a voyage to New Zealand, and from the remarks of others, it appears to me that the chief cause of sea-sickness is, primarily, mechanical; secondarily, physiological: whilst the cooperation of dietetic or other disorders may much aggravate the malady: and it further strikes me that, unless protracted by other agencies, its subsidence will be found commensurate with our becoming used to the motion of the vessel.

As preventives, simple diet, the avoiding of sweets and fat for a week or ten days before embarking, and the taking of a few doses of blue pill and Seidlitz powders during this interval, have been recommended. I have been unable to note appreciable benefit from these measures, the cautious and the careless seeming equal sufferers.

Another recommendation is that, on the supervening of nausea, one should lie down, and maintain the recumbent position; though for how long, is not told. I greatly doubt the wisdom of this: so long as one reclines, one escapes, to a great extent, the motion of the ship; but the needful seasoning is at the same time "shirked", or at the least postponed.

It will, I believe, be found that sea-sickness has its two conditions or stages; the first, that of excitement, in which the stomach is frequently and violently disturbed; and the second, that of habit, and some prostration: this stage being marked by retching, debility, and a sense of such misery and wretchedness, as to render the sufferer utterly indifferent to everything around him. The second of these stages is but the natural result of the first; and the first is the effect of the swinging and rolling movements of the vessel on the peristaltic action of the stomach, checking and reversing it.

If these views be correct, it follows that the cessation of sea-sickness must be looked for less from the operation of internal or external remedies than from as resolute an endurance of its cause as the sufferer can achieve. This principle is confirmed by the experience of sailors, and is in accordance with their advice; viz., persist in keeping up and moving about; take exercise; use exertion, if you can (supposing you are a passenger), because you must if you be a midshipman or sailor. Our worthy captain had his first fit of sea-sickness cured by being sent aloft when he seemed too ill for anything but to lie on the quarter-deck; and furling the maintopsail has cured many a youngster before and since.

Let us then assume that it is good to keep up and move about as much as possible, and that to yield to the inclination to lie down and keep quiet only protracts the suffering. I then proceed to consider some subsidiary agencies for better or worse.

1. *Diet.* The sailor will advise us, and correctly, to eat dry food, and avoid fluids. "Eat—get down something solid—if it be rejected, never mind. Eat again, of plain, wholesome things." My own experience coincides with this; my plate of soup has driven me from the dinner table; but this *contretemps* did not prevent my prompt return to a reasonable meal of solid food. But even this is to be taken *cum grano salis*. I query its applying well, if at all, to the first stage, and think it not available until the stomach has been fully relieved, and some degree of debility induced. Up to this point, demulcents, as gruel, arrow-root, and the like, will probably be best, and these, moreover, taken in the simplest form, without stimulants or spices, and with little or no sugar.

2. *Stimulants.* These in the first stage, I believe, aggravate the symptoms, and are therefore unadvisable. One hears of one passenger being cured by a little porter, another by a little brandy and water, a third by a glass of sherry and a teaspoonful of tincture of gentian; whilst each of these has, on the contrary, made some one else decidedly worse! The explanation of these conflicting statements lies, I suspect, in this: that those whom these agents made worse, were in the first stage, and those whom they relieved, had passed it. The kind and amount of stimulant to be taken will, no doubt, be mainly dependent on the patient's habits and likings. As a rule, I am of opinion the less the better.

3. *Medicines.* Numbers of these have in their several turns been not a little lauded; but their usefulness is probably significantly indicated by their number. Like the asserted remedies for hydrophobia, they are very many and good for very little. People swallow them, and wait; take other doses, and wait again. Thus time is occupied, and attention engaged; the desire for "something to be done" is satisfied, and anxiety appeased; the attack gradually passes by, they get well, and—praise the last supposed remedy they may have happened to employ. This, I believe, to be about the truth with respect to most of the reputed cures for sea-sickness. Sufferers will, nevertheless, continue to use them; and so long as they are not injurious, it is scarcely worth while to forbid them, provided reliance on them do not prevent recourse to the best remedy—exertion.

My own observation would lead me to give a free dose of calomel, six to ten grains, and to follow this in about two hours by one or two pills of aloes and colocynth, after the stomach had been emptied, and bilious vomiting had set in; *i.e.*, about the end of the first stage. A warrant for procuring free peristaltic action is found in the fact that diarrhœa will banish or replace sea-sickness, and that the latter will return as the diarrhœa is checked or subsides. I have noticed some relief from small doses of creasote (half a minim) and magnesia (gr. iij); and that whilst draughts of plain cold water excited vomiting, the addition of a little carbonate of soda obviated it.

4. *External Remedies.* I have used with frequent success a large sinapism over the epigastrium, in the second stage. An opiate plaister in the same situation, and a tight belt, are also well reported of; but with these I have no practical acquaintance. In severe or protracted cases, blistering the epigastrium will probably be valuable as a counterirritant, since the lighter action of mustard suffices for milder attacks.

5. *Mechanical Remedies.* Under this head may be comprised those means which counteract the peculiar motion of the ship or vessel—the cot, the hammock, and the swinging bed of Mr. Brown, with single or double action. My own children had swinging cots for some time, and found much relief and comfort in them. Of merely moderate motion of our ship (a fast sailer, but excessive roller) they were not conscious; but they were sick at intervals for so long a time that I suspect the comfort just named was purchased rather dearly. Lest, however, I be misunderstood respecting the cot or hammock, and in anticipation of the remark that sailors use and prefer one or the other, I would add, that sailors, when afloat, lead *active* lives; and that their activity both banishes sickness and promotes their general health, thus rendering them independent of either swinging or fixed beds. It is occasionally found needful, in severe cases, to cover the cot or hammock with a sort of canopy, to prevent the patient from being harassed by the apparent movement of the ceiling.

In illustration of some of the preceding remarks, may be adduced the instance of one of our passengers, who suffered severely, and for several weeks. She was of a full habit of body, and of irritable temper; and had a most attentive niece, and no less indulgent husband. Thus favourably situated for "getting her own way", she was always taking little messes and slops of either sweet or fatty food; she drank wine and porter, and lay about in a reclining chair; nor did she even begin to mend till we had passed the tropics, and reached high south latitudes and cold weather.

P.S. During heavy gales, and in the wild seas off the Cape (within the parallels of "the stormy forties", and in the waters of the "South Terrific"—facetious, but most expressive terms), more than one of our passengers was affected, long subsequently to perfect recovery from sea-sickness, with symptoms resembling slight cerebral congestion—headache, flushed face, general oppression and lassitude, but little or no nausea. This *malaise* was, however, unimportant and transient.

THE

NATURE & TREATMENT OF CANCER:

BEING THE

Address in Surgery

READ BEFORE THE TWENTY-FIFTH MEETING OF THE BRITISH MEDICAL ASSOCIATION,

Held at Nottingham, July 28th, 29th, and 30th, 1857.

By George Southam, Esq., F.R.C.S., Surgeon to the Manchester Royal Infirmary.

It has been in full reliance upon the kind indulgence of this enlightened and influential assembly, that I have ventured to undertake the responsible duty of delivering the Annual Address in Surgery, and to occupy a place to-day which has on former occasions been filled by some of the most distinguished members of the profession. I feel still greater diffidence in following these gentlemen, because the address is not intended, as formerly, to be a detailed review of the various contributions of the previous year to surgical science (the improved state of our periodical literature having superseded this course), but a critical inquiry into some special department of surgical knowledge and practice.

To my mind, there is no subject better suited for this occasion than that of cancer, not only on account of its practical and speculative character, but because it has engaged a large share of the attention, both of surgeons and pathologists, during the last few years. To allude to the whole of this question within the limits of an essay would be impossible; my remarks will necessarily, therefore, be of a general character, and be directed chiefly to those points which will lead to the most correct principles of treatment. With this view, I shall call your attention to—

I. The Origin and Nature of the Disease.
II. The Circumstances which modify its Growth and Duration.
III. The Influence of Treatment in eradicating or palliating it.

I. Origin and Nature of the Disease.

What is Cancer? In the first place, we must decide what affections are included under the term cancer—a question which, in the present day, may appear somewhat singular. Yet this it is necessary to do, not because recent investigations have not thrown considerable light on the subject, but because some surgeons and pathologists have sought to give undue prominence to one or two particular signs, valuable, no doubt, in connection with others, in determining the true nature of morbid growths, but of themselves insufficient as diagnostic indications. Thus, at one time the *pathologist* maintained that in heterologous and homologous growths might be discovered the distinguishing features between carcinomatous and innocent tumours; at another, that their characteristic signs were to be found in their mode of growth; whilst of late years many have fixed the only true test in the presence or absence of a particular form of cell. In like manner, the *surgeon* thought that he had observed a specific indication of the disease in one or more of the leading symptoms, each having at various times had a certain degree of prominence assigned to it.

Another source of complication has arisen in the variety of names given to the different forms of morbid growths—every new contributor to our knowledge on the subject having generally added some new term to our already over-burdened nomenclature.

Pathologists are doubtless entitled to the fullest merit for their investigations; but it must be admitted that these patient labourers in the cause of medical science have not as yet succeeded in giving us any special sign by which the two forms of growth may be distinguished. It is only, therefore, by comparing the leading peculiarities which both clinical observation and pathological research have revealed as characteristic of each, that at present we can arrive at any satisfactory conclusions.

Description. Without entering into a formal description of carcinoma, I may briefly state that the term includes all growths formed of, or having incorporated with them, an abnormal organised material, which infiltrates itself into the tissues in

which it is deposited, increasing and multiplying itself in other parts of the body, almost invariably returning after removal, prone to ulcerate, and, in its disintegration, destroying the surrounding textures; of constitutional origin, and attended with impairment of the general health, ending eventually in the destruction of life.

These symptoms do not *all* present themselves at the same time, except in the latter stages, but vary in their number and character at different periods of the disease. Thus, the constitutional symptoms usually do not develope themselves until the functions have been extensively interfered with; and in the early stage, the deposit, instead of being infiltrated in the surrounding structures, often forms a distinct tumour, which condition it may retain, especially if seated in bone throughout the entire course of the disease, provided the general infection is intense enough to destroy life in a comparatively brief period.

The recurrence of the tumour after removal, either in its original seat or in other parts of the body, is also not peculiar to carcinomatous growths; for occasionally cystic, cartilaginous, erectile, adipose, and other innocent tumours, follow the same course; their return, however, leading to no injurious reaction on the general system. It is, then, in the tendency of the growths to multiply themselves in the different textures of the body, to return after removal, and to present during some stage of the affection symptoms indicating constitutional vice, with its almost invariably fatal nature, that we have the leading characteristics of cancer.

Whether the local and constitutional conditions are present *ab initio*, is a question respecting which a difference of opinion exists amongst those who have made cancer their particular study; but both clinical inquiry and recent researches into the anatomy of the morbid deposit lead us to believe that its primary seat is in the system at large. Amongst those who advocate its local origin may be mentioned Velpeau (*Diseases of Breast*, Sydenham Society's edition, pp. 446, 473, 752); and, if his statements could be relied on, the question might still remain open for investigation. But his remarks on the curative results of extirpation are so completely at variance with the experience of other surgeons, alike in this country, France, and Germany, that we are led to the conclusion that many of the cases reported by him as cured would have been considered by others as innocent growths.

It is true that the removal of the local disease is often followed by improvement in the patient's general health; that the emaciated and debilitated are sometimes seen to regain their strength, flesh, and natural complexion; and that in favourable cases some advantage in the duration of life is gained—results from which some infer that the presence of the local disease is of itself injurious to the system, by exciting a toxic influence on the same. Such a view might be admitted if the improvement were of a permanent, and not, as it usually is, of a very temporary character, appearing rather to spring from that mental relief which naturally follows the eradication of the most striking feature of the disease.

The absence of symptoms either preceding or coincident with the early signs of cancerous growths indicating constitutional derangement, is often advanced as a proof that the general system is not primarily the seat of the disease; but this argument falls to the ground in scrofula and syphilis, whose constitutional character is never doubted—diseases which, it is well known, frequently present themselves for a considerable period as local affections, without the manifestation of any constitutional disturbance.

It must be confessed, that as yet we are ignorant of any of the signs of the pre-existence of the cancerous diathesis; but it is clearly peculiar to certain constitutions, for it would be impossible to explain on other grounds how one woman may, from a blow on the breast, have a cancerous growth developed, while fifty others exposed to the same accident escape; how decayed or broken teeth so rarely give rise to cancer of the tongue, though these are generally admitted as its exciting cause; how uterine cancer is not more frequent in prostitutes than in those where the uterine system is less exposed to excitement; or why it should appear no oftener in the maternal than in the virgin breast and uterus.

Then what constitutes the element of this predisposition to cancer? At one time, it was thought the morbid matter existed preformed in the blood, because its presence had been detected in the veins. But it is only in connexion with deposits in some part of the body that it has been found (Langstaff, *Med.-Chir. Trans.*, vol. viii, p. 286; Velpeau, *Rev. Médicale*, 1825, p. 367; Carswell's *Pathological Anatomy*); and consequently the natural inference is, that its entrance into the circulatory system was by absorption. Indeed, it can scarcely be supposed that blood holding cancerous matter in suspension could perform its healthy nutritive functions, as it frequently does for years after the removal of schirrous tumours, or in those cases where the disease remains stationary for a considerable period.

It has been stated that, in persons predisposed to cancer, the blood contains a superabundance of albumen or fibrine; but, beyond this fact, organic and minute chemistry have added nothing to our knowledge on this subject. Nor do the experiments of inoculating animals with cancerous matter lead to the supposition that the material exists preformed in the blood, for the majority of cases have been failures; and, in the few instances where it is said to have succeeded, the disease has been purely local,* deposits in other parts of the body having been found in only two instances out of a large number of experiments (Langenbeck, Schmidt's *Jahrbücher*, vol. xxv, p. 104; Velpeau, *op. cit.*, p. 444); and these occurred in dogs, which may possibly have been previously infected, as cancer is not an uncommon affection in these animals. Neither does the hereditary tendency to the disease, which appears to exert its influence in at least one fifth of the cases, support this view;† for it affords no proof that the cancerous material passes with the germ, but merely that it conveys with it a tendency to the production of those conditions which may ultimately lead to its development, just as the germ may convey with it other peculiarities of the parent. But, though the essential element of cancer does not exist preformed in the blood, our knowledge of healthy and diseased nutrition tends to show that the morbid material first appears in its rudimental state in this fluid from perversion of some part of the nutritive process. Its further development is influenced by nutrition generally; and, as this function requires several conditions for its healthy performance, especially a due supply of healthy blood, a certain amount of nervous force, and a natural state of the proper elements of the part, so we may expect that it is through more or less derangement of each of these that the disease becomes fully formed. No doubt it has its principal source in the blood, the other conditions being also implicated, but not perhaps to the same degree. Indeed, if we except cystic formations originating in obstructed ducts, the chief distinction between carcinomatous and innocent tumours, as regards their origin, appears to depend on the extent to which all the essentials of nutrition are affected. If the local conditions, such as the nervous influence and the proper elements of the part, are alone involved, the growth will be of an innocent nature, and its structure resemble that of the part in which it originated; but if the material from which the disease is formed is secreted from cancerous blood, the growth will be malignant; and in proportion to the *extent* of the disease in the blood, so will the characters of the morbid deposit differ from the natural structures of the part, the highest degree of malignancy being characterised by heterologous deposit, the lowest by only a slight deviation from the healthy tissues, as seen in the recurring fibroid and myeloid tumour of Paget, the fibro-nucleated of Bennett, the fibro-plastic of Lebert, or the albuminous sarcoma of Gluge—growths which these pathologists regard as innocent, from the similarity of their cells to those found in some of the embryo tissues, or in lymph and granulations, though their clinical history places them, in many instances, in the category of malignant tumours.

The conditions, therefore, essential to the production of cancer, are partly constitutional and partly local; the constitutional leading to the development of the cancerous element in the blood, by interference with the functions which preserve this fluid in its healthy state; the local separating the morbid material thus produced, and transforming it into cancerous deposit, which replaces, or becomes incorporated with, the proper textures of the part. Neither of these conditions *alone* can develope the disease. A blow or injury cannot of itself produce it; nor can perverted nutrition of a part from any other cause, unless the cancerous element exists in the system. But when this element is in excess, it is sufficient of itself to cause the local affection; as, for instance, in disseminated cancer: indeed, from the course this variety takes, it would

* Dr Watson's and Dr. Copland's (Dict. Pract. Med., vol. iii) cases of cancer being transmitted from wife to husband show the same result, even admitting there was no previous predisposition in both parties.

† Paget found, out of 254 cases of cancer, 60, or 23·6 per cent., had relatives of the same or former generations with cancerous or other tumours (Medical Times and Gazette, 1857, p. 191). Velpeau says more than one-third of the cases he has met with presented this feature (Diseases of Breast, p. 439). Lebert found it in only 14 out of 202 cases.

appear that injury is not so frequently the exciting cause as is generally supposed, the disease not necessarily following injuries in persons so affected.

As regards the tissues which may be affected by cancer, it is obvious that it may be deposited wherever nutrition is in progress; and, consequently, no organised texture is exempt from its ravages.

It is now generally acknowledged that its earliest condition is that of a blastema or fluid, which Virchow (*Archiv*, B. 1, viii) and Vogel (*Path. Anat.*, p. 565) describe as consisting of a firm, compact, amorphous substance, similar to coagulated fibrine, sometimes containing molecular granules of modified protein or fat—characters not materially differing from the blastema of the natural tissues and other formations. In this blastema, cells are developed, supposed by Lebert, Robin, Hannover, Paget, Druitt, and others, to be of a specific nature. Frequently, no doubt, they present appearances which differ from those of the healthy tissues; the cell-wall and its nuclei, nucleoli, and granules, being usually larger. They are also more varied in form, in some cases being round or oval, in others caudate or elongated. The cell-wall is extremely thin and pale, and, when submitted to the action of dilute acetic acid, is so transparent as to display the nucleus and its nucleoli distinctly. In the blastema, granules are also found, as well as numerous nuclei and nucleoli, destitute of any distinct cell-wall. The cells are said to be endowed with amazing reproductive powers, each being supposed to produce, either by fissure or from its nuclei, a second; the granules which the cells and blastema contain also becoming nucleoli, and ultimately parent cells. A fibrous tissue or stroma may also be developed from the blastema, in some cases forming the principal portion of the deposit. It is as yet undetermined whether this stroma is formed directly from the blastema or from the cells; possibly the latter is the transition stage. Nor does it present any peculiarities by which it can be distinguished from condensed or indurated areolar tissue of other parts, except, perhaps, in the arrangement of its filaments; consequently, it is supposed by some not to be a new formation. But it is difficult to comprehend how it should constitute the chief portion of some varieties of cancer (scirrhus), without regarding it in this light: indeed, it would seem to indicate that the cell is still capable of undergoing further development—a view which is confirmed by this form of deposit being usually characteristic of malignant tumours of slow growth; whilst the cellular variety is peculiar to those of rapid formation, probably from the developmental power being destroyed, in consequence of the blood being more highly impregnated with the disease.

As regards the speciality of the cancer-cell, it is questionable how far this can be admitted. Compare it with the transitional epithelia of the different membranes of the body, or many of the gland-cells, or with the fibro-plastic cells of some innocent tumours; and there will appear numerous instances of similarity, as will prove this mode of diagnosticating malignant growths to be most unsatisfactory and delusive. Indeed, its most experienced advocates have given numerous proofs of their inability to apply this test to practice. I need only refer to the works of Nélaton (*Clin. Surg.*, Philad., 1855, p. 457) and Velpeau (*loc. cit.* p. 21) to show that tumours, which run their course and terminate in precisely the same way as cancer, have, under the scrutinising examination of Lebert and Robin, been found destitute of the specific cell; whilst M. Mandl, another experienced histologist, asserts that he has met with the same form of cells in healthy lung. Further, in osteoid and fibrous cancer, there is a general absence of cells, or they are so few in number as often not to be discernible.

There appears, then, no reason to regard the cells found in cancerous growths other than as the ordinary ones formed for the development of healthy tissue, which have taken on an abnormal character, in consequence of the blastema derived from the blood for the nutrition of the part being in a diseased state. Their subsequent development is under some specific influence, which in cancer, as in other morbid growths of constitutional origin, exerts its effects in various degrees, according to its interference with the vital powers. Thus, the blastema of tubercle may be said to be almost destitute of vitality, and therefore incapable of development; and either degenerates into imperfect pus, or undergoes some chemical conversion. But cancerous blastema, being more highly organised, may be transformed into caudate or fibro-plastic cells, with their nuclei and granules; and these may merely reproduce others similar to themselves, or they may go beyond this, and manifest themselves as imperfectly formed fibrous tissues—the cancerous stroma. The new formation in either case has, however, only a *temporary existence*; for, after having arrived at a certain degree of perfection, it almost invariably degenerates.

On the other hand, in the absence of these specific influences, as in the ordinary effused lymph of inflammation or of healthy granulations, the cell is endowed with the power of progressive development, passing from the fibro-plastic cell into filamentous tissue, which finally assumes and *retains* all the characters of the healthy elementary structures in which its blastema was originally generated.

But, though we can ascribe no special features to the cells found in cancer, the microscope has furnished us with much valuable information respecting the nature of tumours generally. Whilst it has shown that the primary elements of all morbid growths do not materially differ from those of the normal tissues, it has also shown that these constituents vary in the degree of their development, in their mode of arrangement, and in their relative proportion to each other; that, in innocent tumours, the difference is slight, whilst in malignant ones it is more marked; the higher degrees of malignancy being characterised by a general want of order in the distribution both of their primary elements and the more perfect structures entering into their composition; which, when accompanied by the presence of an opaque milky or cream-like fluid, yielded by the deposit when submitted to pressure, may perhaps be regarded as the most characteristic pathological signs of cancer.*

The microscope, likewise, has enabled us to arrange the various forms of the disease into three groups, according to the preponderance of their primary elements. One group is marked by an excess of blastema, constituting gelatiniform or colloid cancer; another, by an excess of cells, forming cephaloma, medullary or soft cancer; a third, by fibrous tissue—scirrhus, petrous or hard cancer. These may occur separately, or they may all be present in different parts of the body at the same time, or in the same tumour, each form either remaining distinct, or passing so imperceptibly into the other that it is sometimes difficult to decide to which particular group the disease belongs. The other varieties met with are merely modifications of these, arising from some of the constituents of the body, more or less altered in structure and quantity, being incorporated with them, or from degeneration of the cancerous deposit.

Thus, in hæmatoid cancer—fungus hæmatodes—there is an excess of blood, either free or enclosed in vessels; in melanosis, a superabundance of colouring matter, or pigment contained within cells; in osteoid cancer—the spina ventosa of the older surgeons—of osseous tissue; and in cancroid or epithelial cancer, an excess of epithelial and other cells; whilst, from the degeneration of the morbid material, fat-globules may be infiltrated through the deposit, producing lardaceous or reticular cancer; or it may become converted into calcareous matter; or atrophy may ensue, causing the peculiar cicatriform contractions (Wedl's *Pathology*, Syd. edition, p. 535) sometimes observed in senile cancer.

By the same method of investigation, important information has been obtained respecting the manner in which the morbid material is deposited in the various tissues of the body. It is well known that its tendency is to infiltrate or diffuse itself amongst the different tissues; but the mode of extension, and the effect it produces on the original textures, have only recently been satisfactorily explained, and mainly through the exertions of Virchow (*British and Foreign Med.-Chir. Review*, 1855, p. 391). He has shown that the local changes are not limited to the parts which are the seat of the deposit, but that the surrounding structures, which appear to the naked eye perfectly sound, are also involved. These, when examined with the microscope, are found to be infiltrated with innumerable small cells, gradually increasing in size, and collecting in larger and more numerous groups the nearer they approach the swelling, and, in advanced stages of the affection, sometimes penetrating to a considerable distance into the surrounding parts. The cells and granules extend themselves chiefly along the areolar tissue, and ultimately into the tissue itself, and even into the nerves and coats of the blood-vessels, the normal nutrition of which being interfered with, atrophy of these structures ensues, and their place is supplied with true cancerous deposit. There appears to be, therefore, no transformation of the natural structures into cancer. Either they are absorbed, or they become incorporated with the disease, where they may remain as

* Cruveilhier first pointed out this sign. It is often necessary to wait a few hours after the removal of the tumour before the fluid can be detected.

healthy tissue, provided the blastema is not so completely impregnated with cancerous material as to deprive it of all power of regenerating the original structures (Paget, *Surgical Pathology*, vol. ii, p. 561).

I have alluded to certain fibro-plastic tumours which present during their progress several of the clinical signs of carcinoma, but which pathologists consider to be innocent growths, because they do not agree in their minute anatomical characters with cancer. For a similar reason, the terms "cancroid" and "epitheloma" have been applied to a group of diseases affecting structures covered by epithelia, which have usually been considered carcinomatous. But it is only in the form of cells which enter into their composition that any ground exists for considering them as distinct affections; for they possess, though in a less marked degree, all the other peculiarities of malignancy. The tessellated and scaly cells of "cancroid" growths appear to be epithelia arrested or altered in their growth by disease, just as the cells of other forms of cancer are formed from the diseased state of the cells which should enter into the composition of other healthy structures. In all other respects they resemble carcinoma, infiltrating themselves in the tissues, reappearing after removal, taking on ulcerated action, and ultimately destroying life through the general infection of the system. It is true, they manifest their effects on the system more slowly than cancer of other parts, and that their local changes are also more protracted; but is there nothing in the condition of the skin and mucous surfaces to account for these peculiarities? Do we not find that several other diseases of these parts are extremely slow in their progress—that lepra, psoriasis, and lupus, may affect an extensive surface of the skin for years; that suppuration and superficial ulcers of mucous membranes may continue for a length of time, without impairing the general health? The entire skin, as an excretory organ, performs functions almost as important as any emunctory of the body; but a large portion of it may remain inactive without causing any serious derangement to the health. Not so the other organs, which are so limited in size that any interruption to their functions soon leads to marked derangement of the system.

Cancroid growths certainly bear removal better than cancer generally; but is not this due to their chronic character? And their disposition to return at the original seat, or in its immediate vicinity, which some adduce in proof of their local origin, is entirely in accordance with what follows the removal of other malignant tumours, extirpated under similar circumstances. Thus, when bone or the breast is the seat of cancer, if the diseased part only be removed, the affection almost invariably returns in the portion that has been left.

Nor is their tendency to reappear only in the situation of the original disease so general as some have supposed. So long as the system is only slightly affected, they may confine themselves to a particular locality; but when the constitution shows marked contamination, secondary deposits will be frequently found in other parts. In this respect, they follow the same course as cancer of bone or cellular tissue, both of which generally attack only analogous tissues and parts in the immediate vicinity of the original disease, until the general infection of the system becomes complete, when they extend their ravages to other structures and localities.

But it has been asserted that cancroid and epitheloma not only differ essentially in their primary elements from other forms of cancer, but, says Nélaton, "they never in their progress produce that profound alteration of the organism known as the cancerous cachexia" (*Clinical Surgery*, p. 471). This statement is evidently not borne out by clinical observation. Within the last few months, three cases have come under my own notice disproving this. In one, the patient had suffered from cancer of the nipple for upwards of ten years, and has had marked cachexia and sallow countenance for several months past. The same symptoms appeared in another person, from whose lip, twelve months previously, I had removed an epithelial cancer; and also in a man who had been suffering from the same disease for upwards of four years. I have seen two other cases bearing on this question; one of a female with scirrhous mamma, from whom, five years previously to its development, I removed a cancerous ulcer from the cheek; in the other, there was epithelial cancer of the anus, coexisting with scirrhus of the prostate. Rokitansky, Velpeau, and Paget, have also recorded similar cases.

Further, these affections agree in their minute anatomical characters with carcinomatous growths, portions of their tessellated scales and cells being irregularly dispersed through the proper tissues of the skin, mucous membranes, or other parts covered by epithelia, replacing or variously changing their natural structures; and according as the deposit is situated in an equal degree in all the tissues entering into the composition of these parts, or is in excess in the papillæ and epidermis, or in the subintegumental tissues, so the disease will present variable characters, of which the ordinary cancer of the lower lip may be regarded as the type of the first form; cauliflower excrescence and villous cancer, of the second, or the papillary and epidermoid infiltrations; and the deep seated flat or rounded tubercle, which gives origin to rodent ulcer, of the last. Indeed, the distinction between innocent and malignant structures, as regards their minute anatomical characters, can nowhere be better studied than in epitheliomatous growths; for, in the common warty, papillary, and condylomatous tumours, where the enlargement, whether from abnormal increase of the epithelium, epidermis, or papilla, is simply the result of hypertrophy, or from infiltration of the parts with inflammatory products, the different structures, instead of presenting a confused arrangement, preserve their natural relation to each other; the epithelial deposit, the scales of which are unchanged by disease, consequently not lying within, but upon, their surface.

I can only very briefly allude to the other kinds of doubtful growths in connexion with that important subject, the degeneration of innocent tumours. It was formerly considered that all innocent growths were extremely prone to become cancerous; but, for some years past, pathologists have taught that, if a growth is malignant, it must have been so from its commencement, and that a perfectly innocent one never becomes cancerous. This view is undoubtedly correct in the *majority* of cases, but instances occasionally occur where it is not verified. Take for example the most simple form of growths.

Sir Astley Cooper's experience led him to infer that a fatty tumour may sometimes take on malignant action. Brodie inclines also to the same opinion, and, in support of it, gives the particulars of a case which came under his own observation (*Lectures on Pathology and Surgery*, 1846, p. 282). Simple cysts may become cancerous, but perhaps less frequently than is generally supposed; for the fungosities which are found in their interior are more frequently the result of inflammatory action than of any constitutional cause. It is in the ovaries they are met with most frequently; and, when accompanied by cachectic symptoms, their cancerous nature seems to be confirmed. But the cachexia more probably arises from imperfect nutrition, caused by pressure of the tumour on the surrounding parts, than from any general infection of the system. Cysts, however, do become the seat of cancer; a well marked case of this kind came under my notice three years ago, where a simple cyst, which had existed some years in the mamma, became cancerous, as well as the surrounding structures; and there is now amongst the out-patients at the Manchester Infirmary a female, under the care of Mr. F. Heath, where a malignant tumour of the face, attended with the usual constitutional symptoms, originated in a simple cyst, which had existed for twenty-eight years. Cartilaginous tumours are well known to contain occasionally cancerous material; and warty growths of the skin are said to be frequently the earliest evidences of epithelial cancer. Several of the fibro-plastic tumours to which I have alluded must also be admitted to be either innocent growths which have subsequently assumed a malignant character, or that pathological data are too imperfect to enable us to distinguish between the two diseases in their earliest stages.

On the other hand, the two varieties of tumours are sometimes found in the same person, quite unconnected with each other. Thus, females with fibroid tumours of the uterus are occasionally found to be affected with cancer of the os and cervix. Chronic mammary tumour may occur with cancer of the same part, each disease remaining distinct from the other, of which Mr. Paget has recorded three well marked instances. Warty growths of the skin I have frequently known to have remained quiescent in persons suffering from cancer in their immediate vicinity. Still it must be admitted that innocent tumours may sometimes become cancerous, but not from transformation of their structure, the morbid material being incorporated with it as it is with the other tissues of the body. They, however, seem less liable to its ravages than the healthy structures; and the cancerous diathesis, though it may in no way have contributed to their original formation, must be first developed before they can become affected.

[*To be continued.*]

THE PHYSIOLOGY, PATHOLOGY, AND THERAPEUTICS OF THE MOTOR FUNCTIONS OF THE UTERUS.

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[*Continued from the Volume for* 1857, *page* 1047.]

PART III.—THERAPEUTICS (*continued.*)

Strychnia is the next oxytocic to which I am desirous of directing attention. It is, as far as I can ascertain, quite new as an agent for exciting the motor functions of the uterus; but as an emmenagogue it is not new, for the late Dr. Bardsley, of Manchester, used it in this way, and had no small faith in it. The properties of strychnia as a powerful excitant of the spinal cord have been so long and so well known, and have been made use of in medical practice with so much success, that it is surprising it should never have been introduced into obstetric practice. And this the more so, because of late years the minds of obstetricians have been so much occupied with the enunciation and elaboration of the excito-motor theory of uterine contractions.

It first occurred to me to use strychnia as an oxytocic about two years ago. It may not be uninteresting to detail the circumstances which led me to what I believe, and hope will prove, a valuable addition to our means of influencing the motor operations of the uterus.

I was summoned one evening to attend E. H., an out-patient in the maternity department at St. Mary's Hospital. She was about thirty years of age, and the mother of three children; her previous labours had all been slow. Her temperament was leucophlegmatic; complexion fair; muscular system flabby; pulse slow, very small and compressible. A more flabby atonic person I hardly ever saw. On examination per vaginum, the passages were found to be cool, moist, and very relaxed; the os uteri was already somewhat dilated, soft, thin, and *dilatable*. The presentation was natural. The pains came on about every five minutes, and the bag of membranes, which was unbroken, became somewhat tense at each contraction; but the uterus acted very inefficiently: each pain was not only very weak but very short. After waiting about an hour, I returned home, as no progress whatever was made. In the course of the night a messenger called me to her again, and I found things exactly in *statu quo*. As no progress was made during an hour's patient expectancy, I went home again. Two or three visits were made the next day, and still there was no advance whatever; no alteration in the character of the uterine contractions; no change in the position of the fœtal head, or in the condition of the maternal passages. My patient had pains now and then; she alternately dozed, ate, and drank, and appeared only a little fretted (as much as her lethargic nature would permit) at the duration of her labour. About 10 P.M. I made a visit; and, while sitting at the bedside cogitating upon the disagreeable prospect of another night's devotion to the goddess Lucina, and feeling rather in a "rusticus expectat, dum defluat amnis" state of mind, I ran over to myself the different ways of exciting the uterus to act, and the *modus operandi* of the agents used for that purpose. Nearly all the means which occurred to me, except ergot of rye, resolved themselves into eccentric irritations of the spinal nerves. The ergot appeared to me inadmissible, as the os uteri was not so far dilated that I could hope to procure delivery within the short limit of time which I thought imposed by regard for the safety of the fœtus; and I did not like to alter the labour from the natural by rupturing the membranes. But what if, instead of employing eccentric spinal irritation, I could exalt the polarity of the spinal cord itself, and leave the natural excitor stimuli to their usual mode of operation? It was clearly a case of diminished irritability of the nervous centres, and particularly of the spinal cord. The next question which presented itself was—what agents do we possess capable of exalting the polarity of the spinal cord? The readiest answer to this was—strychnia. Persuaded that I had found the key to my difficulty, I went home and procured a solution of strychnia in very dilute hydrochloric acid, of the strength of one grain to the fluid ounce. On returning to the case, I administered one-sixteenth of a grain of strychnia in half a wineglassful of water. In a little more than ten minutes the pains increased in frequency and force; but in fifteen minutes more they subsided again somewhat. The same dose was repeated, and in a short time the uterine contractions again became exacerbated and hopefully persistent; the fœtal head, too, was lower in the pelvis. Nearly forty minutes had now elapsed since the first dose. A third was now given to the extent of one-sixth of a grain, and in about fifteen minutes more the membranes were ruptured in consequence of the severity of the pains. The labour was terminated in less than an hour and ten minutes from the exhibition of the first dose of the strychnia; the uterus contracted firmly after the expulsion of the placenta, which took place spontaneously; there were no excessive after-pains; not a single bad symptom appeared; and both mother and child did extremely well. The whole amount of strychnia given was seven twenty-fourths of a grain. The result was very gratifying, because here the patient had been at a standstill for nearly thirty hours; there was no advance whatever in that time, and no promise of advance; she might have travailed for thirty hours more if nothing had been done. It was still more satisfactory, because I felt that, by the application of the known physiological action of a drug, I had procured, with perfect safety, a new therapeutical result. By the application of physiological knowledge the boundaries of obstetric art had been somewhat extended.

Since the above case occurred I have used strychnia in eight cases; care has always been taken to select cases of *pure atony*. On no occasion have I ever resorted to strychnia in order to overcome an obstacle, however small. Believing that oxytocics are *never* permissible except to promote uterine contraction when it is below the natural standard of force and frequency, I never use them except for the remedy of such conditions. Cases of atony, moreover, vary very much in their nature; inertia of the uterus from fatigue ought to be met by rest and diffusible stimulants; from mental preoccupation, by diversion or anæsthesia; and so on. It is by no means justifiable to lash the uterus in every case of inertia into action, by direct stimulation of either the uterine ganglia or the spinal cord.

For these reasons, the number of cases in which I have felt it proper to use a remedy of so powerful and definite a nature as strychnia has been small. The result of nine cases of *pure inertia uteri* has been as follows:

1. In every case the mother has done well.
2. In every case the child has been born alive; and has, to the best of my knowledge, suffered nothing from the exhibition of the drug.
3. In one case only have the uterine contractions been at all immoderate; and in that instance a glass of spirits was given to the patient at her own urgent request: so that all the exacerbation of uterine contraction was not attributable to the strychnia.
4. The dose given has ranged from one-eighth of a grain to one-third, variously divided.
5. The pains have been visibly augmented in force, frequency, and duration, within periods ranging from eight to twenty minutes.
6. Labour has been accomplished within one hour and a half in every case from the first dose given. The longest was one hour and twenty-two minutes; the shortest eighteen minutes. In three cases the drug was given in strong tea, without the knowledge of the patient.

It is not pretended that these nine cases are conclusive as to the value of strychnia in obstetrics. It may yet remain to discover that there are cases in which it is not admissible, but which are yet cases of pure atony—defective polarity of the spinal cord. But in any nine cases of ergotic labour which have fallen under my own observation, I am persuaded I have seen more inconvenience than in the nine cases in which I have administered strychnia.

In the *Lancet* of June 14, 1856, I published a short letter, in which I incidentally referred to the use of strychnia as an oxytocic. Curiously enough, a letter from Dr. Matthew Corner appeared in juxtaposition with my own, detailing a case of poisoning by strychnia. The patient swallowed two grains of strychnia by mistake. She was pregnant, and aborted in the course of the action of the poison. The case terminated favourably. I have since become acquainted with the case of a lady who aborted five times consecutively whilst under the influence of nux vomica given as a tonic.

Objections will doubtless be urged against the use of so powerful a remedy as strychnia in obstetrics. Practitioners who prefer the *laissez faire* system will exclaim against haste and rashness; the timid will feel alarmed; and many will feel that a thorough diagnostic skill ought to be the property of whoever may venture to use such an agent. Some persons will confound between *inertia uteri* and *lingering labour;* between defective motor action, and a mechanical impediment.

My answer to all objectors is this: first, labour as it occurs in crowded cities and highly civilised communities, occupies in part the domain of pathology; to wait is to prolong disease; secondly, timidity is no proof of scientific election and discriminating caution; the motto of the accoucheur should be "nec temerè, nec timidè"; and, thirdly, if people will confound between what is vital and what is mechanical; if they cannot separate between a case of pure atony or inertia uteri, and a case of delay arising from an *obstacle*, however slight, they had better leave obstetrics alone. Diagnostic skill, finally, is attainable by all; the facts of every induction lie ready to hand.

Galvanism and Electricity. Like all agencies which produce marked and powerful effects upon the animal economy, *galvanism*, and its allied forces, have attracted the attention and excited the hopes of physicians in no ordinary degree. The analogy which subsists between electricity, galvanism, and that which, for lack of a more definite knowledge, we call *nervous force*, has materially augmented the conviction that these imponderables contain great therapeutic virtues. Accordingly we find that numerous applications of them have been made. It cannot, however, be said that the therapeutical experiments which have been instituted have been guided by anything more than conjecture, except in some exceptional cases, or that any great amount of success has attended them. Mature reflection might, perhaps, have damped the sanguine expectations of those who looked to electricity or galvanism for much assistance in the treatment of disease; however analogous to nervous force these agents might be, whether in their mode of generation or in their manifestations, they could never in any degree supply its place. The one is essentially a function of animal life; the others quasi-chemical, and incapable of conversion into their animal analogue, or permanent importation into the system. There are doubtless normal electrical conditions of the body, which being abrogated would induce pain and inconvenience; in the same manner there are conditions of heat and light which are necessary to health. To a certain extent, too, heat and light may be turned to therapeutic advantage. But we rather look to the continuous action of proper degrees of each, as conditions necessary to the preservation of health, than to extreme applications of them for the cure of disease. In like manner, galvanism and electricity, like other imponderable agents, must take a comparatively low place in the scale of therapeutics.

The first application of galvanism in obstetrics was made by Herder in 1803. In 1834, Dr. Ramsbotham proposed its use in cases of inertia uteri, in the lectures published in the *Medical Gazette* of that year; but I am not aware whether he carried his proposal into practice. In 1839, Stein and Kilian constructed galvanic forceps, making the blades of different metals. As might have been anticipated, the instrument turned out to be an utter failure, and its inventors had the candour to acknowledge this in 1845. Everyone accustomed to obstetric practice knows that the mere application of the forceps will quicken the action of the uterus, and it was the observation that this exacerbation was as marked in cases where common forceps were used, as where galvanic ones were resorted to, that convinced Stein and Kilian of the inutility of their invention. In 1844, Hœninger and Jacobi made experiments upon galvanism as applied to inertia of the uterus, but as they gave ergot also in their cases, the results arrived at must be nugatory. The most prominent advocate of galvanism has been Dr. Radford, of Manchester.

I have collected sixteen cases from other sources, in which galvanism has been used, either for the purpose of hastening delivery, setting up uterine contractions during pregnancy, or in cases of *post partum* hæmorrhage. They are recorded by Professor Simpson, Dr. Oldham, Mr. Cleveland, and others. Of these sixteen cases, in six no effect whatever was produced; in eight the application was successful; in two the uterine contractions were suspended, and in one of these, not merely for the time being, but for twenty-four hours afterwards. These results are not very encouraging; and, indeed, though Dr. Radford's results are more favourable, there are fallacies attaching to the employment of the remedy which seriously affect his conclusions. Such fallacies consist of the influence exercised upon the mind of the patient by the apparatus and the ostentatious nature of the proceeding. The objections to the use of galvanism consist in the possibility of its altogether suspending uterine action; in the well known fact that its continued application exhausts the irritability of the nervous centres; and in the practical fact, that in those very cases in which its use would be most justifiable and most necessary, the apparatus would almost infallibly be quietly at home in our own cupboards instead of at the bed-side of the patient. Gardini found pregnant women to be in a state of negative electricity. I do not know whether this fact has been applied to any practical purpose, or whether it has occurred to obstetricians to insulate the persons of women to whom galvanism has been applied for obstetric purposes. This might easily be done by means of the glass pedestals upon which pianos are commonly placed. Galvanism and electricity act as excitors of the various nervous centres, both ganglionic and spinal; not exalting their polarity, as some other agents, but simply *exciting them to act*, and simultaneously exhausting them.

[*To be continued.*]

SEROUS EFFUSIONS IN A FŒTUS.

By WILLIAM WALKER, Esq., Surgeon.

MRS. F., aged 30, a small, healthy person, was taken in labour with her seventh child on December 3rd, at 4 A.M., and at her full time. On examination, the os uteri was found to be fully dilated, and the head low down. The pains were feeble, but still sufficiently effective to expel the head at half-past seven. For fully half an hour afterwards no further advance was made, when I managed to hook my forefinger into the axilla of the child, and almost perforce effected delivery. A profuse flow of amniotic fluid immediately followed. I found, on examining the infant, no evident signs of life; the abdomen was enormously enlarged, with extreme puffiness of the eyelids. I had it immediately placed in a warm bath, and friction made over the chest. After several minutes, it showed signs of vitality, as evinced by slight gaspings, and in a short time it uttered a feeble cry. It survived till 4 P.M., and passed a considerable quantity of urine two hours before death. As I felt somewhat curious to know the state of things, I requested permission for a *post mortem* examination, which was readily granted. I found, on removing the sternum, that the lungs were free from disease, but the cavity of the chest contained three or four tablespoonfuls of serum. The heart was free from adhesions; but there was more than the usual amount of fluid in the pericardium. On opening the abdomen, a large quantity of thickish fluid escaped, somewhat of the colour of dirty water. The peritoneum was firmly adherent to the liver and colon throughout their whole extent. The stomach, spleen, and kidneys were healthy. The small intestines were forced back into the lumbar region, had a thickened feel, and were filled with a greenish-looking substance, almost of the consistence of putty. The bladder was empty.

REMARKS. One would expect, from the *post mortem* appearances in the foregoing case, that some form of inflammatory action had been set up; else how can we account for the great amount of effusion with extensive peritoneal adhesion? more particularly as regards the colon, which was so entirely fixed as to prevent any degree of motion whatever. On referring to several works on midwifery, and to others, I find cases mentioned where abdominal dropsy was found, with tubercular disease scattered through the several organs of that cavity; but nothing relative to any morbid state of the peritoneum.

I have been induced to publish this case owing to the appeal made some time ago by my friend Dr. Barker, of Bedford, when he spoke of the few contributions made on fœtal diseases; and join him in the hope "that some central mind may group such diseases together in their respective classes, and elaborate a true and philosophical system of uterine pathology."

PRESENTATION OF A TESTIMONIAL TO R. TURNER, ESQ. A gratifying occurrence took place on December 23rd, 1857, in the National School Room of the village of Frant, Kent—the presentation of a silver tea-pot, cream-jug, and sugar basin, to R. Turner, Esq., surgeon, of Tunbridge Wells, in testimony of the great kindness and attention the poor of the parish of Frant have received at his hands during a lengthened period of his attendance upon them as their union medical attendant. The subscriptions in the first instance originated with the poor themselves, who were afterwards generously assisted by their more wealthy fellow-parishioners. The articles presented were neat in pattern, and good in quality. The tea-pot bears the following inscription:—"To Richard Turner, Esq., surgeon: presented by the parishioners of Frant, of all classes, in grateful remembrance of his unexampled kindness and attention, during many years, to their sick poor: 1857."

Transactions of Branches.

ROCHESTER, MAIDSTONE, AND GRAVESEND DISTRICT MEETINGS, IN CONNECTION WITH THE SOUTH-EASTERN BRANCH.

CASE OF HYSTERIA CONNECTED WITH DYSMENORRHŒA.

By Adam Martin, M.D., Rochester.

[*Read December 11th*, 1857.]

On December 5th, 1854, Miss C. S., aged 23 years, of a very amiable disposition, delicate constitution, nervous temperament, and living in a damp and marshy locality, came under my care.

It appears from the history of her case, as given by her mother, that she has always been delicate, and unable to take more than a very moderate degree of exercise, without suffering considerable exhaustion for some days; the catamenia have been regular as to time, but have for several years been attended with some pain during the first three days of each return, and with the discharge of a membranous substance. The bowels have been generally costive; appetite not good, and capricious. She was, about nine weeks ago, exposed to cold while the catamenia were present, and suffered at the same time some mental excitement, accompanied with disappointment. She was afterwards seized with tertian ague, and a peculiar nervous complaint, which has been gradually increasing until the present time. She has been under regular medical attendance.

On examination, I found her lying in a state of apparently perfect unconsciousness. The eyelids were shut and twitching; the face flushed; the head hot; the skin warm and soft; pulse 80, small and weak; the breathing calm and regular; the catamenia were now present. The bowels had not acted for the last four days. While I was watching her, she raised her head and shoulders suddenly from the pillow, and was seized with violent contraction of both legs, which were forcibly drawn up to the nates, and felt very hard and rigid to the touch. She commenced immediately rubbing the legs with both her hands, and continued to do so until her attendant began to do the same, and applied warm flannel, which soon afforded relief; when she became easy and quiet, but still remained insensible. In a short time the face became suddenly very much flushed; the arms contracted: the hands clenched and drawn up to the clavicles; the abdominal muscles felt rigid; and she seemed to be suffering a bearing down pain, exactly like labour pains. The expression of her face and general appearance gave me the impression that she must be suffering great agony. This state continued about fifteen minutes, after which she seemed to fall into a quiet sleep for a short time, and then awoke, and appeared perfectly sensible and very cheerful; and assured me that, while in the above state, she was altogether unconscious of the least suffering; and that, while speaking to me, she only felt a sense of general weakness, some confusion in the head, slight pain in the legs and arms, and tenderness on pressure in the lower abdominal region. The tongue was perfectly clean and moist; there was little thirst; appetite very capricious; pulse 80. I embraced the opportunity of her being awake to give her an ounce of castor oil, which she took very readily. She soon relapsed into a comatose state; and, while in this state, she seemed to suffer great uneasiness and distress on pressure being applied to the spine, especially over the dorsal vertebræ and over the uterine region; and appeared particularly annoyed, and began to move her head rapidly from side to side, on my rubbing the hair of her head between my finger and thumb. She had, according to her attendant's account, been seldom awake more than a few minutes, and had been insensible from one to nine hours at one time. She was very unwilling to have her linen changed, or her bed made oftener than once in eight or ten days; and always suffered great exhaustion from the operation. When placed in bed, she invariably began to knock the pillow and beat the bed violently, until she had made a comfortable hollow nest for herself, after which she appeared quite satisfied and quiet. She always manifested great uneasiness on any person attempting to alter the position of the bedclothes. She was frequently seized with cramps in the legs and toes, and made signs to the nurse to rub them and apply warm flannels, which generally relieved her in a short time; but sometimes the attendants had to continue the rubbing for many hours. She occasionally showed a dislike to one or other of her nurses, and then manifested great uneasiness when that particular one approached near to her. She managed to give due intimation whenever the bowels or bladder were about to act. She had lived generally on sausages, ham, and other indigestible articles of food. When awake, she was cheerful, contented, and anxious for her restoration to health, and very sorry for the continued trouble and anxiety which she gave to all her family.

The above is a pretty accurate account of this distressing case, in its daily course for the last two months preceding the time when I first saw her. I ordered her two grains and a half of calomel, and two aperient draughts to be taken in the morning; and a stimulating liniment, composed of croton oil and tincture of cantharides, to be applied over the whole spine.

December 6th. The medicine acted four times, and removed an immense quantity of black, hard, and very offensive matter, from the bowels. She expresses herself as more comfortable in her feelings; but the labour-like pains continue to return as yesterday.

December 7th. The catamenia are still present, but the pains have ceased, and she has been more frequently awake. The liniment has produced a very considerable eruption all over the course of the spine.

December 19th. She has continued nearly the same since last report, excepting being more frequently awake. A person fired off a gun to-day near to the house, while she was in the insensible state: the noise seemed to disturb her very much; and she rolled about for nearly two hours, and seemed very uneasy. This is the first time she has manifested any uneasiness from noise. When she awoke, she said she had heard no noise, and was perfectly insensible of what had occurred.

January 1st, 1855. She has been more frequently awake, and on several occasions for three-quarters of an hour at one time. The appetite is much improved. She has taken a fair breakfast every morning, and a good dinner of game every evening; but has suffered from uneasiness in the bowels, accompanied with distressing borborygmi. The catamenia returned last evening, at the regular and expected time. To-day she seems to suffer very much from the labour-like pains, during which the hands are clenched and drawn up to the clavicles; but there are no spasmodic contractions of the legs.

January 3rd. She has suffered very much from the labour-like pains, borborygmi, and general uneasiness; and has been very little awake. She slept naturally for several hours last night, which she has not done for the last three months. The catamenia still continue, but without pain.

February 3rd. The catamenia returned on the 1st, attended with very severe labour-like pains for some hours. She now feels much better in every respect, with the exception of some pain in the forehead.

February 21st. She has been gradually improving since last report, and has been able, when awake, to employ herself in reading and in crochet-work. The catamenia are expected in a few days. I ordered her the following mixture:—

℞ Sodæ biboratis ʒj; magnesiæ calcinatæ ʒij; tinct. rhei ʒvj; infusi calumb. ℥xj. Two tablespoonfuls to be taken three times a day.

March 2nd. The catamenia appeared on February 25th, attended with very little pain. She feels much better in every respect, and continues awake about twenty-five, and is insensible about ten minutes, each time. She has slept very well every night for five or six hours, ever since the 3rd of January. She has been placed on the sofa each day for an hour.

March 23rd. The catamenia returned on the 25th, without pain. She feels much improved.

April 25th. She is much improved in every respect. The catamenia returned on the 22nd, without pain. She can now walk by herself in the room, and sleeps soundly every night, and is very seldom insensible.

June 13th. The catamenia returned, unaccompanied with pain, at the regular time. She is now able to walk down stairs and into the garden by herself, and feels much improved in all respects; but is still insensible for a few minutes two or three times a day. She purposes going to Tonbridge Wells for change of air.

July 3rd. She bore the journey to the Wells very well, and returned home last evening, perfectly restored in health, with the exception of feeling a degree of general weakness.

Remarks. The plan of treatment pursued in this case was the following. With a view to relieve the spinal irritation, I

ordered the liniment, composed of croton oil and tinctura lyttæ, to be applied every night so long as the pain continued. I gave her a pill, composed of calomel and extract of colocynth, every night, so as to act freely on the bowels every day; and a mixture, composed of citrate of iron and quinine and infusion of quassia, to be taken regularly every day. This plan was pursued, as regularly as the state of insensibility would permit, until the 2nd of March, when I ordered her a pill, composed of extract of colocynth and extract of hyoscyamus, every night; and fifteen grains of the saccharine carbonate of iron three times a day. This plan she pursued until discharged. I may observe that, in my experience, I have, in nervous complaints, found the carbonate the most efficacious of all the preparations of iron. This patient had for several years, and for the first three months while under my care, suffered very severe pain for three days on each menstrual attack, for the relief of which I ordered the mixture referred to in the report of March 21st, and first recommended by Dr. Simpson, of Edinburgh, and which I have in many cases found of great benefit in relieving the pain connected with dysmenorrhœa.

Periscope.

MIDWIFERY AND DISEASES OF WOMEN.

INTRAUTERINE INJURIES.

WE are indebted to Dr. R. U. West of Alford for the following translation from CASPER'S *Handbuch der gerichtlichen Medicin*. It has been forwarded by him with the idea, in which all will join, that a knowledge of the opinions of a very eminent, as well as recent, authority on a very interesting subject, may be acceptable.

Intentional destruction, or abortion procured intentionally, of the *fœtus in utero* "by external or internal means" on the part of the mother or of a third party, with or without the consent or knowledge of the pregnant woman, is threatened by the laws with very heavy punishments. The question, then, naturally arises:—whether generally it is possible that the child in the womb can be *injured* or *wounded*, and in that way *killed*, by "external means" in the widest acceptation of the term, including therefore *blows* and *thrusts* against the pregnant abdomen, *falls*, and the like? A doubt of this kind with regard to the origin of injuries to the child in its mother's womb, from external violence, does not seem justified, when we consider that all, even the best and newest treatises on midwifery and judicial medicine, have unanimously cast aside all doubt—which may have arisen from the consideration of the situation of the fœtus in the protecting liquor amnii—with the assurance that experience has long ago decided the point. The consideration, however, that not one single case has ever come before us in which the thought has suggested itself for a moment that such an intrauterine lesion had taken place—the consideration, I repeat, that on the whole but very few cases of the kind have come to public knowledge, and that those few cases are continually quoted over and over again as proofs—may well suggest a critical examination of these so-called "experiences". The declaration of the result of this examination is important in a work of this kind, when we consider the *penal* importance of the subject.

The oldest recorded case of the kind is the one communicated by Valentin. (*Corp. jur. med. leg. constans e Pandectis, etc.* Francof. 1722. Fol. Pars I, sect. II, Cas. 18, "De contusione abdominis in gravidâ, abortum causante.") A pregnant woman, in a scuffle, was trodden on by a man on her left side. *Fourteen weeks* afterwards, she gave birth to a healthy boy, and on the following day to a second boy—dead. "Cute a cranio separatâ in omnibus capitis ossibus, e. g. osse frontis, osse sincipitis dextro et sinistro, osse occipitis, rubicundæ quædam et sanguine suffusæ maculæ, grossi aut quartæ imperialis partis magnitudine repertæ fuerunt, quæ tamen omnino recentes cum sanguine videbantur" (and yet the injury took place a quarter of a year before!). "Pariliter omnes suturæ, plus quàm in recens natis observatur, distabant, ut ossa ad digiti latitudinem sibi invicem imponi potuerint." But the fœtus was very much decomposed! for the liver was black, soft, so that it "digitis comminui potuerit;" the lungs were, the right lung at least, black, "ut partim putridi," etc., and "brachium dextrum latusque dextrum ferè nudum et corticulâ destitutum videbantur, imo totum corpus ità penè constitutum erat!" The case, therefore, has evidently no value whatever, and does not in the slightest degree prove what it is pretended to prove, as every putrid child presents, more or less, similar appearances. Further, if Plouequet is quoted, we shall find in the original (*Abhandl. über die gewaltsamer Todesacten.* 2 Aufl. Tübingen, 1788, s. 281 et seq.) that although he introduces a case by Gardner, and another by Glockengiesser, he expresses much doubt, and considers the acceptance of this influence very limited. Gardner's case was one of a hard labour, in which the child was born with a head-swelling, and with the apophyses of the lumbar vertebræ broken. "It seemed as if this part of the child had been injured, which, judging from the age of the child, and from its *decomposed* state, must have happened about a month before the labour. When I asked the lady whether she had sustained any injury during her pregnancy, she said that about *two months* before she had had a heavy stroke on the abdomen, by falling on the edge of a large wash-basket." Thus the fall on the belly was *two*—and the injury *one* month old!—A difficult labour and a putrid child! Probably the broken vertebræ were attributable to the labour. Of Glockengiesser's case we learn only this: that "the skull was divided into five pieces," but not a word further about either pregnancy or labour! The case published by Klein (*Kopp, Jahrb. der Staatsarzneikunde*, x. s. 64) gives us also room for doubt. The child, whose mother had tumbled into a hole in her thirty-fourth week, was born easily and quickly after a natural labour, but "brought into the world with it a short, misshapen left leg, the tibia of which was broken in its middle." A surgeon, who was called in, "did not convince himself of the possibility of a cure," and "announced a *monstrosity*." It is true that subsequently another surgeon "felt a distinct *callus*;" we see, however, that it remains very doubtful whether this, which was alleged to be a fracture merely by a country midwife, but was afterwards regarded as something else, was really a fracture at all, or whether it was not perhaps some disease of the misshapen bone. Later "cases" are not any better. In the one published by Mende (*Henke's Zeitschrift*, III. s. 277, u. f.), the faculty of Greifswald has already in a very well grounded judgment decided, "that the child had not, before the commencement of the labour, sustained a mortal injury through external violence suffered by the mother, so that it died of it four days after; but rather that it was to be assumed, if not with absolute certainty, at any rate with considerable probability—the midwife's account of the labour having been in the highest degree imperfect and unsatisfactory, that the child had received in the birth itself those serious injuries—viz., the ecchymosis on the head and the fracture of the right parietal bone." Without doubt this was the case also with the child described by Hirt (*De cranii neonatorum fissuris Diss.*, Lips. 1815), which was born dead, "with an usually large and uncommonly strongly ossified head," whose mother "had a too narrow pelvis," and "whose right parietal bone was broken in three places, the membranes torn in several places, and all the bones red with extravasated blood." The child in Albert's case (*Henke's Zeitschrift*, XVIII. s. 441), whose mother, two days before her confinement, had fallen with her abdomen on a boundary stone, came into the world dead, with its left parietal bone torn from its connexions, and a breach through which a portion of brain was protruding. The description of the injury is very indistinct; it is important, however, to remark that not a syllable is said about the extent to which decomposition had advanced in the corpse of the child. The case published by Becker (*op. cit.* XXVI. s. 239) was that of a *breech-presentation* which was terminated with the *forceps*—that by Horn was one of a child of a married woman who had become pregnant by a man not her husband, and who had *buried* the child. (*Henke's Archiv.* 1819. Sept. Oct. Heft.) Under such circumstances, it is no very uncommon thing to find injuries of the head: but to attribute them to violence during pregnancy, while other explanations lie on the surface, is surely forbidden by medical logic. It is to the highest degree surprising that, considering the excessively rough treatment often experienced by pregnant women among the lower orders,—blows and falls, etc., daily,—cases such as those recorded, of injuries to the fœtus, should be so very rare. And, keeping in view the other considerations which have been pointed out, it appears that we are quite justified in concluding, that *it is by no means proved that intrauterine injuries and fractures of the bones in the fœtus can be produced by violence to the body of a pregnant woman.* Deadly effects of other kinds, such as those produced by downright concussion of the uterus itself and of the child, cannot be doubted. To such belong separation of the placenta with its

consequences, deadly concussion of the brain of the fœtus, etc., etc.

This is, Dr. West observes, very trenchant criticism; and in the same way, doubtless, Dr. Casper would explain away the cases recently published in this Journal. For my own part, I have the consolation of reflecting that in my observations on my case (that of supposed dislocated vertebræ, *v.* Journal, Nov. 21st), I did, myself, suggest the possibility that the displacement was caused by the severity of the labour itself—an explanation quite in accordance with the opinions expressed as above by Dr. Casper.

It has not been thought necessary, while rendering the German of Dr. Casper, to translate into English the extracts quoted by him in their original Latin—the Latin being a tongue universally understood of the profession.

British Medical Journal.

SATURDAY, JANUARY 2nd, 1858.

SEA-BATHING IN THE SERPENTINE!

"A West Countryman," anxious for the purification of the Serpentine, has written a letter to the *Times*, proposing that it shall be filled with salt water! Our enthusiast dilates upon the pleasure of bathing in so invigorating a liquid, and writes altogether in such glowing colours with respect to the effects of his scheme upon public health and pleasure, that we cannot help suspecting he has seen the frontispiece of *Punch's Pocket Book*, in which the Serpentine is pictured as a marine bathing-place, wherein fair nymphs, fresh from Rotten Row, disport themselves under the double opera-glasses of Regent Street loungers. "A West Countryman" thinks that we could import salt water from Brighton every morning by means of a pipe laid along the railway. This part of his scheme is, however, objected to by another correspondent of the *Times*, on the score that salt water will not keep, and that its smell, after a journey from Brighton, would be something like that of rotten eggs. A third correspondent draws the attention of the public to some passages in the second Report on Quarantine by the General Board of Health, which are particularly interesting, and especially worthy of the attention of medical men. These passages refer to the alleged ill effects arising from the mixture of fresh and salt water—a combination which is said to be most favourable for the production of malaria, in consequence of the destruction of organic life which it occasions, and the elements which it furnishes for chemical reaction. The following illustration, from the report of M. Melier, is given in corroboration of this statement.

"The locality of the experiment, for such it may be truly called, was the Maremma of Lucca, on the shore of the Mediterranean. The ground is divided into three principal basins, interspersed with numerous lakes and pools, which for ages had been inundated from time to time by the sea, thus causing the mixture of fresh with salt water. The insalubrity of this district, we are told, was so great that 'inevitable death' was the consequence of passing a single night during the months of August and September in this pestilential locality. In order to remedy this sad state of affairs, in 1740 a valved sluice was placed in the Burlamanca—the channel by which the sea water entered the principal basin—so constructed as to shut out the tides when they rose, and to allow the fresh water to escape when they ebbed. These works were finished in 1741. The success was so complete that fevers, which had never before failed to appear, ceased in the following year, and from that time the district became healthy. The village of Viareggio, previously abandoned, became an important place, and a favourite summer residence of the first families in Lucca. In 1768 and 1769 the fevers suddenly reappeared, as in their worst periods. What had happened? Only this—the sluice had got out of repair, and the waters were again mixed. The sluice was repaired, and fever disappeared. The deaths, which had risen to 1 in 15, were reduced in the following year to 1 in 40 of the inhabitants. The same accident occurred in 1784-5, with similar consequences, and the evil was remedied in the same manner."

If these experiments can be depended on, a "West Countryman" is clearly guilty of an attempt to establish a nest of pestilence amongst us "with the very best intentions." Looking at the question, however, in a broader light, it would be very important to have the matter investigated by competent observers, as a number of problems, which at present remain unsolved, might perhaps be settled by their labours. The Registrar of Births, Deaths, and Marriages has more than once asserted that sea-side watering places are less healthy on the whole than those situated at high elevations inland; and we know that cholera invariably appears first at sea-port towns. The advocates of the infectious character of this disease will of course consider that this fact is accounted for in a more simple manner than by referring it to the ill effect of the mixture of fresh and salt water. Be this as it may, there is room for careful and scientific inquiry in this direction, with respect to the origin of different forms of fever, which, according to M. Melier, can be directly traced to the cause to which we have alluded.

To return, however, to the Serpentine correspondence which our contemporary has just given to the world, we may state, by way of a joke for the new year, that a correspondent, who sees the weak point of a "West Countryman's" suggestion, makes one of his own, which outherods Herod. If salt water, divorced from its ocean bed, will persist in turning putrid, why not bring Mr. Gosse to the rescue? The corrective is simple; turn the Serpentine into one gigantic marine *vivarium*—let us have aquatic weeds to give out oxygen to the fish and to take in the carbonic acid from them, and let us have snails and all kinds of queer fish and zoophytes to eat up the superabundant animal and vegetable matter! A. C., who makes this suggestion, says that all this could be accomplished "without offering any impediment to bathers". Indeed! We may fancy the hardiest urchin who endeavours to wash his begrimed skin in the present adulterated Serpentine would look long and fearfully, before he plunged into the midst of zoophytes and strange fish, such as one gazes on in the Zoological Gardens in Regent's Park; while we realise to ourselves the ocean depths, in which Schiller's diver wrestled with fearful sea-monsters for the possession of the golden cup.

"Das Auge mit Schaudern hinunter sah,
Wie's von Salamandern und Molchen und Drachen
Sich regt' in dem furchtbaren Höllenrachen.
Schwartz wimmelten da, in grausem Gemisch,
Zu scheusslichen Klumpen geballt,
Der stachlichte Roche, der Klippenfisch,
Des Hammers gräuliche Ungestalt,
Und dräuend wies mir die grimmigen Zähne
Der entsetzliche Hai, des Meeres Hyäne."

Our readers must smile with us at the amount of absurd and impracticable propositions which swarm in the columns of the *Times* on the slightest provocation. The cleansing of such a

sheet of water as the Serpentine has become a matter of national as well as of metropolitan importance, inasmuch as there can be no doubt that, in its present polluted state, it is a fertile source of disease to that fashionable suburb of London to which country visitors are mainly drawn. Any remedy for this gigantic nuisance will therefore be an incalculable boon to the country, and would be gladly advanced by any one interested in public hygiene. To simply clear out the Serpentine, and line its bottom, would be to evade rather than to grapple with the difficulty. What is wanted is a plentiful supply of fresh water, which shall convert the lake into a running river. "Another West Countryman" suggests the means by which we may accomplish this great desideratum.

"Allow me," he says, "to suggest the sinking of a deep and thoroughly efficient artesian well at the head of the Serpentine (similar to the one now in course of completion at the Bois de Bologne, Paris). This would be ornamental and useful at once, by keeping up a continual running stream over the fountain basins and through the Serpentine river, and it would then be available for watering roads, scouring through and cleansing the filthy drains and sewers of Westminster; and all this positive good and benefit would be obtained at an outlay trivial in amount."

This idea is so admirable, that we hope Sir B. Hall, who has done so much for our public parks, will work it out to a practical conclusion.

THE WEEK.

The London papers have been during the week discussing the relative qualities of English and foreign bread, and giving, we think, a most unfair verdict in favour of the continental batch. The *Spectator*, which started the discussion, sets out with a most palpable error,—it asserts that the rule throughout England is to make "white bread." There is a cockneyism in this statement, for which we should scarcely have given our cotemporary credit. In London, without doubt, white bread is universal; but in the provinces (always excepting the larger cities) it is scarcely ever seen. Has the Editor never tasted brown bread? Is he ignorant that it is the custom to make the staff of life at home in most country neighbourhoods, and that alum, the great whitener, is never in these cases introduced? Much as the London bread is abused, we question if it is at all prejudicial to health. The quantity of alum present is very minute, and we have seen no evidence of its having produced ill effects. Taking the average bread of England, we have no hesitation in saying that it is infinitely better and more wholesome food than the average bread of any country in Europe. We must confess, however, that our method of making a loaf is not only antiquated but dirty. If the public could only see the condition of many baking-houses, and could only inspect the hands of the workers in them, there would be one universal outcry for a reform in this manufacture. We rejoice then to hear that science promises speedily to dispense with the hand process, and to make light and wholesome bread entirely by machinery. The Messrs. Carr, of Carlisle, have, we believe, patented a very ingenious process, by which not only the dirty hands, but also the sometimes equally filthy barm, are dispensed with. Flour, water, and salt, are placed in an iron digester partially exhausted of air, and then mixed with aerated water by means of revolving iron arms. When the ingredients are thoroughly incorporated, the mass is taken out, and instantly swells to a greatly increased bulk by reason of the large quantity of compressed air contained within its surface. This simple process produces, we are informed, a perfectly light and wholesome bread in a much quicker time than by the old process. This invention may be considered a great national gain, inasmuch as it will eventually cheapen and improve the staff of life.

The youngsters are verily going ahead of us. *Punch* has long had his eye on the advance of the rising generation, and has immortalised, with facetious pencil, the precocious juvenile who politely offered a "weed" to his grandfather, an old gentleman ignorant alike of the thing and of his name. But *Punch's* tobacco-loving juveniles, and all his other little boys with manly tastes and pursuits, must stand aside, and let their better pass—a real substantial entity, one Master George Foster. Of the proceedings of this youth, who, to strip him of all romance, is a druggist's boy, aged about nine years, there is some account in our news-columns at page 19. In the evidence taken in a case of attempted suicide, it came out that he was the vendor of the poison to another boy of his own age; and moreover, that this little drug-vendor had been in the habit of further imitating his elders by indulging in counter practice. "He knew the boy Cross before, and he had come to him with a bad arm." The master of this boy seemed not aware of the rivalry of this small assistant of his. "He did not allow him to sell medicines of any description, nor to prescribe for patients at any time....He sold the oxalic acid early in the morning before he (the master) came down stairs." We only hope that Mr. Hutchins made Master Foster practically acquainted with the therapeutic properties of cane on his arrival home.

But here our joke must stop: the matter is serious. One boy of nine years old sells a pennyworth of oxalic acid to another boy of the same age, who obtains it under the pretext of requiring it for boots. He has, however, evidently been commissioned by the would-be suicide, his cousin; who, in the presence of his accommodating—and probably unsuspecting—relative, "scrunches it, and then puts it in his mouth in small pieces and swallows it." The boy who sells the poison acknowledges the act, and further confesses that the other had come to him for advice; and that both drugs and advice had been furnished by him without his master's knowledge. The master excuses himself by pleading ignorance of the boy's movements. What is to be said or done in such a case? Surely this history points out once more the necessity of some stringent measures regarding the sale of poisons. They ought not to be left in any shop where a boy—or, indeed, where any one but the master or a thoroughly trustworthy assistant—can obtain access to them. If they are left in reach of shop-boys, and suicides or murderers thus obtain them, the master of the shop ought to be made amenable to heavy punishment.

We are happy to hear that our distinguished associate, Dr. B. W. Richardson, has just been elected an Honorary Member of the Literary and Philosophical Society of St. Andrew's. He was proposed by Professor Day, who laid great stress on Dr. Richardson's double claim to the honour, both as one of the most successful experimental physiologists of the age, and

as one of the most active promoters of sanitary science. The Society of Scientific Medicine (*Gesellschaft für wissenschaftliche Medizin*) in Berlin also, at a meeting held on November 16th, elected Dr. Richardson a Corresponding Member. A similar honour was some time ago conferred on our worthy associate, Dr. Cockle.

THE LATE WILLIAM THOMAS BELL, Esq., OF GREAT GRIMSBY, LINCOLNSHIRE.

The record of short-lived genius is a solace to the wounded spirits of surviving relatives, and a stimulus to the emulation of aspiring minds. Medical biography, indeed, cannot have a choicer theme, than the sudden blight of the budding hopes of youthful ambition. Hence the subject of this brief memoir claims a niche in the mausoleum of departed worthies.

The late William Thomas Bell was the second son of John Bell, Esq., Surgeon, and Mayor of Grimsby. His deceased son, who had only just completed his twenty-seventh year, was a young man of fine parts, steady perseverance, and great decision of character. He had enjoyed the advantage of a liberal education at Kingston College, Hull, under that distinguished scholar, Mr. Francis, and afterwards under a private tutor. Such a mind, so cultivated, when transplanted to the metropolitan field of medical and surgical observation, soon made its powers felt, and won golden opinions alike from teachers and fellow-pupils. The profession, to which he devoted himself, and which became the ruling passion of his advancing years, was also his choice from a very early age; for when quite a child, he shewed the greatest anxiety to witness operations. On going to London, he was judiciously placed in the family and under the care of Mr. Adams of St. Helen's Place, Bishopsgate Street, Surgeon to the London Hospital, who has kindly furnished the following interesting particulars of his late *protégé*.

"Mr. W. T. Bell came to reside with me in October 1848, in order to prosecute his studies in medicine and surgery at the London Hospital. I cannot help stating, that his conduct and demeanour, whilst under my roof, endeared him to all branches of my family. I soon discovered, that his father had carefully grounded him in the elements of his profession. He passed through the various phases of a medical student's life with great credit, and more especially devoted himself to that branch of the profession, in which his talents have recently shone so conspicuously, I mean surgery,—in the operative department of which, as a student, he took peculiar delight. In due course of time, he passed his examinations at the College of Surgeons and Apothecaries' Hall; and was soon appointed House-Surgeon to the Hospital. Here his field of usefulness became more extensive; and the surgeons of the Hospital found that they could place every confidence in his judgment in the management of cases during their absence. This appointment he held for the full term allowed by the rules of the Hospital; and during this period he enjoyed ample opportunities for practising many of the operations of surgery. I need scarcely say, that he fully availed himself of the rich stores afforded by the Institution; and, at the time when many are just beginning to become surgeons on their own account, Bell was really an experienced surgeon, and equal to any emergency. He afterwards went to Paris to perfect himself in the operative branch of his profession; and from the tenour of his letters from that place, I could plainly trace such a keen appreciation of the importance of operative surgery, and such an ardent spirit in the cultivation of it, as, coupled with former studies, rendered him, during his short career at his native place, a blessing to the people of his neighbourhood, as well as to his immediate friends. It may fairly be said of him:

'Multis ille bonis flebilis occidit.'"

Though most actively engaged of late years in a laborious country practice, his manuscript records of cases bear witness to his zeal in cultivating the literature of his profession. A few of his papers have from time to time appeared in the Association Journal; but his most finished production is a spirited brochure containing a report of "Eight Cases of Lithotomy and Lithotrity successfully operated upon." Nor was his moral nature out of keeping with his superior intellect. His benevolence was chiefly conspicuous in the relief he imparted to human suffering in his own proper sphere. He was wont to say,—"the rich *will* have medical assistance; the poor *shall* have it." Hence, in obeying the impulses of his generous nature, he exhausted himself in a series of disinterested acts of compassion. Enfeebled by the discharge of his arduous duties,—by long rides, by fastings and watchings, as well as by professional anxieties,—his nervous system succumbed to an ill-timed attack of epidemic fever prevalent in the district. He therefore encountered it under every disadvantage. It was a grave example of the gastro-enteric form of typhoid fever; and, as it resisted all the attempts made to check its insidious ravages, the patient sank on the twenty-first day from profuse internal hæmorrhage. With great nervous irritability, he nevertheless had but little delirium throughout; and, when the prospect of death dawned on his thoughtful spirit, he eagerly laid hold of the sustaining hopes and consolations of the Gospel.

Pleasant memories of Mr. Bell's noble and endearing traits of character, both at home and in society, will long live in the minds of his bereaved friends. His rising character, as a professional man, is proved alike by the respect shewn to him when living, and by the general sorrow evinced at his death. He was beloved by all classes of society, and for several days after his decease the shops in Grimsby were for the most part closed. His funeral was consecrated by the tears, not of his kindred only, but also of a multitude, who crowded round his bier to testify their deep sense of the loss they had sustained by his early death.

Humphry Sandwith, M.D.

1, Albion Street, Hull, Dec. 26th, 1857.

Association Intelligence.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, January 1858.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: GENERAL MEETING.

A GEREAL Meeting of this Branch was held at the Hen and Chickens Hotel, Birmingham, on December 11th, 1857; EDWIN BARTLEET, Esq., President, in the chair. There were also present: A. Alcock, Esq. (Smethwick); A. Baker, Esq. (Birmingham); R. L. Baker, Esq. (Bordesley); T. Boisragon, M.D. (Birmingham); G. J. Brown, Esq. (Birmingham); W. Browne, Esq. (Lichfield); E. H. Coleman, Esq. (Wolverhampton); J. M. Coleman, M.D. (Wolverhampton); W. Downes, Esq. (Handsworth); Bell Fletcher, M.D. (Birmingham); J. Fraser, M.D. (Wolverhampton); J. J. Hadley, Esq. (Birmingham); H. Hancox, M.D. (Wolverhampton); J. L. Hobbes, Esq. (Belbroughton); J. H. Houghton, Esq. (Dudley); B. Hunt, Esq. (Birmingham); G. Jones, Esq. (Birmingham); W. Jauncey, Esq. (Birmingham): W. J. Kite, Esq. (West Bromwich); G. B. Knowles, Esq. (Birmingham); G. H. Marshall, M.D. (Birmingham); E. Moore, Esq. (Halesowen); M. H. Morgan, Esq. (Lichfield); L. Parker, Esq. (Birmingham); O. Pemberton, Esq. (Birmingham); H. Roe, M.D. (Birmingham); J. V. Solomon, Esq. (Birmingham); C. Somerville, M.D. (Bloxwich); W. F. Wade, M.B. (Birmingham); C. Warder, M.D. (Birmingham); C. E. E. Welehman, Esq. (Lichfield); H. T. Whittell, Esq. (Birmingham); T. W. Williams, Esq. (Birmingham); C. Yarwood, Esq. (Birmingham); G. Yates, Esq. (Birmingham);—and, as visitors, W. J. Moore, Esq. (H.E.I.C.S.); S. A. Parker, Esq.; and J. F. Woody, Esq. (Tamworth).

CONGENITAL FISSURE OF THE STERNUM: CASE OF M. GROUX.

M. Eugène Groux, of Hamburgh, the subject of congenital fissure of the sternum, attended the meeting, and presented his interesting conditions for the inspection of the members. The tendency of the opinions expressed, as to the nature of the pulsatile swelling opposite the third and fourth ribs, was almost entirely in favour of its being the right auricle of the heart—a result mostly in accordance with the views of some of the most distinguished members of the profession who have examined the case.

INJURY OF THE FACE, WITH DEPRESSION OF THE UPPER MAXILLARY BONE. BY J. H. HOUGHTON, ESQ.

Mr. HOUGHTON then read an account of a case of severe injury of the face, with depression of the superior maxillary bone, in which he had raised the part pushed down into the mouth, to the marked relief of the patient's condition, who was unable to protrude the tongue until this was done. The appearance presented by the patient was further illustrated by a photographic drawing. The case was followed by paralysis of the portio dura of the opposite side.

Mr. YATES and Mr. PEMBERTON, in the discussion which followed, expressed their conviction of there having been fracture of the bony palate present, in order to account for the dislocation downwards of the part. It did not seem equally clear how the paralysis of the opposite side was to be explained.

The PRESIDENT gave notice that, at the next General Meeting of the Branch, certain alterations in the Laws would be proposed for adoption.

MEDICAL BENEVOLENT FUND.

HAVING lately issued an appeal for pecuniary aid—an appeal which the Committee, and all interested in the Fund's benevolent proceedings, trust will meet with a warm, hearty response—I now give the Minutes of the proceedings of our Committee meeting in November this year: I *can* say no more than these Minutes say! JOSEPH TOYNBEE, *Treasurer.*

At a meeting of Committee, held November 24th, 1857, at New Burlington Street, the sum of £175 was voted.

CASE I. A physician, aged 86 years, formerly practising in the counties of Suffolk and Kent. Voted £10 last month; but, having died before receiving it, an appeal was made to the Treasurer by his daughter to be allowed it for the purpose of burial, etc. From her great respectability and integrity, from the great expense of her poor father's last illness, and her own very limited means, she being a widow with a family to support, the request was immediately granted.

CASE II. A lady, aged 44 years. Five children, between the ages of 19 and 6 years, all at home, and dependent. Without income. Never relieved by the Fund. Husband, M.R.C.S., getting a very small salary at sea. This case was deferred for further inquiry from last month. Sir J. Forbes and the Treasurer having found that this poor lady was doing her duty nobly, having dismissed her servant, and she and her children struggling dutifully, advanced £15 to pay a list of small tradesmen's bills. This grant the Committee raised to £25. This poor lady, since the grant, has been able to let part of her house, and is up and doing for her family. She writes:—"Dear Sir,—It is with extreme gratitude that I write to thank the Committee for the great interest they have taken in our most distressing case, which, under Providence, has been the means of preserving us from ruin and despair. As soon as I received your munificent gift, I with great pleasure paid all the pressing demands upon me, and shall be able to live comfortably for a few weeks. I have bought shoes for myself and children."

CASE III. A widow, aged 41 years. Eleven children to support, between the ages of 20 years and 10 months (expecting her confinement in four months), and *six buried*. Husband, M.R.C.S., just dead; was a union surgeon of sixteen parishes; was kicked by a colt, producing concussion of the spine; rendered helpless, confined to bed several weeks, and just died consumptive, leaving no means. Never relieved before. Voted £50.

A clergyman writes thus:—"Poor Mr. R. stood well as a surgeon in this county; but he had nothing to depend upon but his practice, and, having a very large family to support, he could save nothing; so his wife and children have only to depend upon Providence for protection and support." We, in hope of receiving more assistance, voted £50 in this case. Was it not well bestowed? Read the following letter of thanks to the Treasurer:—"Honoured and dear Sir,—God Almighty bless you and the gentlemen of the Committee for the most acceptable grant allowed me. I cannot find words in which sufficiently to express my gratitude. I purpose applying the money . . . . . and the remainder to supply our wants until I should (D.V.) recover sufficiently from my confinement to exert myself for my children by taking pupils. . . . . Once more fervently thanking you . . . . most gratefully yours ——."

CASE IV. A widow, aged 45 years, in London, needlewoman, in poor health and impaired eyesight, struggling eleven years with four children between the ages of 17 and 12 years; two sons now provided for; two daughters (one in ill health) quite dependent. Relieved three times. Income £20 per annum. Out of employment the last twelve months, and now confined to bed. Voted £10. "With feelings of grateful joy, I beg to acknowledge the receipt of ten pounds. Words are inadequate to expressing obligations to a Society which snatched me and my poor children from utter destruction. Thrown upon the world in a moment by the illness of my husband, I was for a time bewildered, until a kind Providence directed me to dear good Mr. Newnham, whose sympathy has ever pleaded for me during my six years journey of affliction. My earnest prayers are ever offered up to Heaven for each individual member; and that God may bless you is the sincere prayer of ——."

CASE V. A physician, aged 42 years, in London, single, formerly of high standing, and lecturer of a Provincial School of Medicine of eminence; author of a work of repute; lost considerable property in family securities, and maintaining poor relations. Never relieved. Income small and precarious, arising only from literary work. Voted £10.

CASE VI. A single lady, aged 38 years, in London, daughter of a gentleman, M.S.A., who outlived his practice at the West. No income. Never relieved. From the recent death of a very aged mother, has lost a provision. Has the prospect of succeeding in keeping a respectable school. Voted £15.

CASE VII. A widow, aged 52 years, in London, three children, two realising £10 per annum each, the other provided for. Late husband M.R.C.S. and L.S.A. Income precarious, arising from needlework. Relieved three times; in all, £20. Voted £10.

CASE VIII. Two single ladies, aged 23 and 21, daughters of a practitioner, M.R.C.S. and L.S.A., in the country forty years. Lost his practice from deafness and ill health. Gone to Australia. No income. Never relieved. Voted £10; to be placed in the hands of a gentleman who takes charge of a fund for assisting the daughters to emigrate to their father.

CASE IX. The wife, aged 49 years, of a practitioner in the country, M.R.C.S. and L.S.A. One son, aged 17 years, in Australia with his father. Never relieved. Income precarious, arising from nursing children. Desirous to emigrate to her husband. Voted £10; to be placed in the hands of a gentleman who holds her emigration fund.

Here is an extract from her letter:—"I beg to offer you my heartfelt thanks for a remittance of ten pounds towards my passage to Australia; I cannot find words to thank you; it is

indeed a great kindness, a real charity. With much gratitude, believe me", etc.

Case x. A practitioner before the Act of 1815, aged 73 years; married; three children, who are only just able to support themselves. Relieved once. Income £12 per annum, and the remnant of a practice. To be placed in the hands of a Member of Committee for distribution. £10 was voted.

Case xi. A widow, aged 79 years, of the Jewish persuasion. Late husband a Member of the Corporation of Surgeons of London, 1796. Two grandchildren dependent on her. Very infirm; had a fracture recently of the condyles of the humerus entering the elbow-joint. Income five shillings and sixpence per week. Relieved once. Voted £5.

Case xii. A widow, aged 52 years. Two sons: one with diseased heart, quite dependent on her; the other only able to support himself. Late husband a highly respectable practitioner in the country, L.S.A.; many years labouring under dysentery, and ultimately died of cancer of the larynx and œsophagus; all means exhausted. Voted £10.

Case xiii. A widow, aged 61 years, in Warwickshire, with diseased heart, helpless, and compelled to have a nurse. Three children, married, in Australia, and one to a young surgeon: all unable to render assistance. Late husband M.R.C.S.; much respected; once relieved in dying illness. Income £30 per annum, from an old patient of late husband. Voted £10.

One other case, postponed for more strict inquiry.

Note. Besides having the object of obtaining sympathy and thereby funds for our truly noble charity, I publish this report of our proceedings in November, in order that a comparison may be drawn between the system of a society like ours which gives aid through a committee elected by and from the body of subscribers, and to whom it holds itself responsible, and the system of a society where recipients have to apply for the votes of the whole body of subscribers, sometimes numbering many thousands, and with whom the responsibility is so divided as absolutely to cease to exist at all. Look, for only one minute, at the results. I will hazard the statement that our seventeen annuitants (six of whom are provided also with comfortable homes), among whom we divide about £300 a year, and the twelve recipients of our £175 in November, obtained their aid at the average expense of one shilling only each person, without, too, the worry, suspense, excitement, and may I say degradation, of a prolonged canvass. On the other hand, I have evidence to show that in the unfortunate system so usually adopted of each subscriber giving a vote, thousands and thousands of pounds are annually thrown away by the poor candidates and their friends, a system of jobbing in votes is adopted, and canvassing becomes a regular hack business. The rule is, that a poor candidate must not expect to win the first "put up." How should he, when there are sometimes between ten or twenty thousand votes? but he must stand severe fights. Look at the list of successful and unsuccessful candidates in these large polling charities, and it is palpable that the cause of deserving poverty is often trampled under foot by the more noisy and friend-making claimants. J. T.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, December 8th, 1857.

Sir C. Locock, Bart., M.D., President, in the Chair.

A CONTRIBUTION TO THE SCIENCE OF TERATOLOGY.

BY HENRY R. SILVESTER, B.A., M.D.LOND.

The congenital deformity existed in both upper extremities. In the right arm, the radius was entirely absent. The upper part of the ulna and the lower extremity of the humerus were modified to compensate for the deficiency. The defective parts in the hand were the scaphoid, trapezius, and the metacarpal bone and phalanges of the thumb. The pronators, supinators, flexors, and extensors of the radial side of the carpus and of the thumb were absent. The flexors and extensors in the middle of the arm were abnormal, but those on the ulnar side were normal. The hand was fixed in a prone position, and flexed to such an extent that the radial side of the index-finger lay adjacent to the radial side of the forearm. The left arm was more deformed. The scapula was well formed, except that the glenoid cavity presented the form of a hemispherical eminence. Little more than the lower extremity of the humerus existed, and a small cartilaginous nodule represented the radius. The carpus presented only the pisiform, cuneiform, and unciform; the metacarpus the three inner bones. The little and ring fingers were persistent. The soft parts of both arms presented many interesting peculiarities, and were described in detail.

The following were amongst the conclusions drawn from the facts contained in the paper. A Law of Compensation prevails during the growth of the body in monsters—a certain tendency to render the parts as nearly normal as possible, and to make up by excessive formation for the defective development of an adjoining part. This principle may be shown equally to exist in the animal and vegetable kingdoms. The leading shoot of a plant being cut off, its place is supplied by the development of an adjacent lateral branch In the same way, when the carpels of fruits are irregularly developed, the defect is remedied by the excessive growth of a corresponding portion. In the animal kingdom, an example may be taken from the subject present. The outer part of the great sigmoid cavity of the ulna is rendered larger than usual by projecting forwards and outwards. It is concave, and the concavity is directed upwards and outwards, and it becomes exactly adapted to the capitellum of the humerus, or that part which usually articulates with the head of the radius. In this way, the integrity of the elbow-joint is to a certain extent maintained, notwithstanding the entire absence of the radius. In the right arm, the median artery, which is usually a small branch of the interosseous artery accompanying the medium nerve, compensates for the deficiencies of the ulnar artery by giving off digital branches, and completing the superficial palmar arch. In the right arm, a branch of the interosseous nerve from the median trunk compensates for the absence of the radial nerve, and supplies digital branches on the back of the hand for those fingers which are usually supplied by the radial. The arrest of development or defective condition of the radius, which appears to be the rule in congenital malformations of the human forearm, is not the normal state in brutes. The ulna is the bone which in them is atrophied. In the horse or ox, the ulna is retained only in so far as it is required to strengthen the radius, make the joint of the elbow secure, and give advantageous attachment to certain muscles; it forms what in human anatomy would be called a process of that bone. The hand is maintained in its proper position by the radius. When the radius is defective in length, or absent, or too long, the posture of the hand is abnormal.

The paper concluded as follows:—It having been proved that the malformation of the germ owes its origin to something connected with our peculiar mode of existence, and if, as I have endeavoured to show, the tendency of the laws regulating the formation of the body is to render the parts as nearly normal, and the body as capable of life and existence as possible, it can scarcely be said that monstrosities "offer an apparent exception to the inferences which have been drawn from the animal kingdom in general concerning some attributes of the Creating Power", a theory which has been advocated by an eminent physiologist.

ON THE HISTOLOGY OF THE SUPRARENAL CAPSULES.

BY G. HARLEY, M.D.

The author began by pointing out that the suprarenal capsules could not properly be said to diminish in proportionate size and activity of function with advancing years. He placed upon the table several preparations of suprarenal capsules, taken from individuals of different ages, to prove that their development proceeded at a certain ratio after birth. He moreover stated that, as they did not become proportionally more atrophied in old age than many of the other organs, it might naturally be supposed that they had a certain function to perform in adult as well as in fœtal life. Dr. Harley then called attention to the great variety of size and shape of the suprarenal capsules throughout the vertebrata, and afterwards proceeded to point out the appearances presented to the naked eye by healthy suprarenal capsules. He denied the existence of any large cavity in the centre of the healthy human suprarenal capsule, and said that when such was found it was the result either of accidental rupture of the medullary substance, or as the effect of disease. He pointed out, however, the existence of a number of small sinuses in the centre of the organ. Dr. Harley said that the cortical and medullary portions of the suprarenal capsules, which are so different in colour, have equally distinct microscopical characters. The former, which constitutes the greater part of the organ, consists of a number

of cells, arranged in irregular sized rows in a fibro-areolar matrix, the rows of cells appearing like a number of dark yellow columns placed perpendicularly to the surface. The cells, when examined individually, are seen to be composed of a homogeneous cell-wall, filled with granules, pigment, and some fat globules. Each cell possesses a well marked nucleus, although it is not always visible without the employment of reagents. The easiest way to demonstrate the existence of a nucleus, the author said, was to colour the cells with carmine.* When floating free in the field of the microscope, the cells appear irregularly round; but, when grouped together, they have a somewhat polygonal form. The cells are arranged in a number of larger and smaller masses, which are placed in regular rows, and thus give rise to the columnar appearance. In some cases a column is composed of several cell-masses of different lengths, placed end to end; in others it consists almost entirely of one long cell-mass. Each column, as well as each cell-mass, is separated from the others by delicate fibrous tissue, in which is included the vessels and nerves. Sometimes the cell-masses present the appearance of long tubes, enclosing a single straight row of quadrilateral cells. Each cell-mass is closed at the extremities, and is surrounded by a delicate homogeneous membrane. The dark slate-coloured medullary substance of the suprarenal capsules has a very different structure from that just described. It is composed of a net-work of fibres, in the meshes of which are a number of large nucleated cells, which have been described by various writers as ganglion corpuscles. Dr. Harley thinks, however, that these, like the cells in the cortical substance, are true secreting cells. The suprarenal capsules are very freely supplied with bloodvessels. Their course and distribution were minutely described. The author concluded his communication by making a few remarks on the supposed functions of the organ, in the course of which he observed that in the suprarenal capsules of the frog he had found blood-corpuscles in various stages of development. Each point of importance in the paper was illustrated by diagrams and microscopical preparations.

MEDICAL SOCIETY OF LONDON.

SATURDAY, DECEMBER 5TH, 1857.

FRANCIS HIRD, Esq., President, in the Chair.

STAPHYLOMA OF THE EYEBALL. BY R. TAYLOR, ESQ.

THE specimen was one of unusual size, which he had recently removed from a woman, fifty years of age, at the Central London Ophthalmic Hospital. It was of long standing, the cornea having been destroyed eighteen years previously by purulent ophthalmia. The other eye suffered from sympathetic inflammation to such an extent as to endanger vision, and it was necessary to remove the source of irritation. Mr. Taylor then removed the eyeball by dividing the muscles—an operation which, in this instance, he considered preferable to the ordinary one for staphyloma. The enlargement was chiefly due to the thinning and expansion of the cicatrix which replaced the cornea, in part also to the yielding of the anterior half of the sclerotica. The lens, enclosed in its capsule, lay loose at the bottom of the eye; the capsule was covered with large patches of calcareous matter. The lens was converted almost entirely into a calcareous mass. It was to the presence of the lens thus altered, rolling over the retina, as it did, at every motion of the eye or of the head, that Mr. Taylor attributed the irritation which had caused disease of the other eye. He therefore suggested the propriety, in all cases of purulent ophthalmia in which the cornea has sloughed, of putting the patient under the influence of chloroform, and ascertaining whether the lens be still present. If so, it would be better to remove it, as, in eyes thus disorganised, it is almost certain to become the seat of calcareous degeneration, and, as in the present instance, and in many others which had come under his notice, to cause serious injury to the sound eye at some future period.

* This is a new process lately discovered in Germany. It was very briefly described by Dr. Harley. The principle of "imbibition", as it is called, is founded upon the fact that various animal tissues absorb and retain pigments with different degrees of avidity. Thus, for example, granular tissues possess a special attraction for colouring matters. Homogeneous substances, on the other hand, display but a feeble affinity for them. A cellular is consequently more readily tinged than a fibrous structure; and in the tissues composed of aggregated cells, various parts are coloured in different degrees of intensity. Thus the homogeneous cell-wall retains its colourless appearance long after its granular contents have become deeply tinged, and the nucleus, which is usually the most granular part of the cell, has become of a prominent dark hue.

POLYPUS OF THE UTERUS. BY I. B. BROWN, ESQ.

The tumour had been successfully removed by ligature and incision.

Dr. SAVAGE said that no difficulty would have been experienced in removing the growth by the *écraseur*, which would have been a far preferable mode of proceeding to that resorted to by Mr. Brown.

INSTRUMENT FOR REMOVING FOREIGN BODIES FROM THE EAR. BY W. HARVEY, ESQ.

It is made like a wedge-shaped sharp pointed screw. In cases where the syringe and forceps failed to remove the impacted substance, this would be found useful.

THE ERECTILE AND VENOUS SYSTEMS OF THE FEMALE PELVIC ORGANS, AS ILLUSTRATIVE OF THE PATHOLOGY OF CERTAIN OBSCURE DISEASES. BY H. SAVAGE, M.D.

Dr. SAVAGE'S paper was a carefully condensed account of a series of dissections of the pelvic viscera in the female, lately undertaken by him; the extremely important and interesting practical deductions which concluded the paper being also equally condensed. Dr. Savage submitted to the Society a selection from a number of very highly finished drawings, taken and corrected at the dissecting-table by the well known anatomical artist, Leviellé. Dr. Savage remarked, that the erectile system of the female consists of the bulb of the vagina, clitoris, erectile coat of vagina, and bulb of the ovary, now demonstrated for the first time. The subdivisions of the pelvic venous plexuses, quite justifiable on the pathological grounds subsequently adduced, were—the perinæal (superficial and deep set), the vaginal, the utero-ovarian, the uterine, and the two pampiniform plexuses connected with the bulbs of the vagina and ovary respectively. The two bodies above alluded to as erectile are inclosed in an unyielding fibrous envelope (first noticed by Dr. Savage)—an essential contradistinction as regards a mere venous plexus. The bulb of the ovary is a long, compact, venous body, extending from the uterus to the ovary, which lies upon and is partially buried in it. Like the bulb of the vagina, it is provided with a special sheath, which, although thin, is enough to establish its erectile character. The office assigned to this "bulb of the ovary" is that of tending to push the organ itself towards the prehensile extremity of the Fallopian tube. The two remarkable leech-shaped bodies (bulbs of the vagina) lying on each side of the vagina, immediately subjacent to the anterior fibres of the so called vaginal constrictor, are analogous to the bulb of the male urethra, the intervening spongy prolongation being represented by a part of the pampiniform, or rather pecteniform, venous plexus of the clitoris. The chief pathological deductions referred to were, the diagnosis and anatomical characters of circumscribed and other tumours of the perinæum, *e.g.*, cysts, abscesses, etc.; and of certain pelvic tumours, avowedly the most embarrassing affections the practitioner has to deal with. A highly important practical distinction was drawn between pelvic hematoceles and pelvic varicoceles; the fatality of the former—one out of three—being ascribed to mistaking one form for another in their surgical treatment. The anatomical constitution of a fibro elastic ring at the entrance of the vagina, its influence in parturition, and its importance in all operative procedures on the perinæum (such as Fricke's operation, or any modification of it), were pointed out. To the erectile coat of the vagina was attributed the source of obstinate hæmorrhage in the operation for cystocele by the removal of a piece of mucous membrane over the most prominent part of the tumour, and the probable cause of the difficulty in getting the resulting wound as well as the vesico-vaginal fistula to heal. The difference between erectile growths into the os uteri and those elsewhere in the vagina, with many other matters of surgical importance, were elaborately dwelt upon by Dr. Savage, as elucidated and explained by the new views expressed in his interesting and valuable paper.

Mr. NUNN said he had gone over much the same ground as Dr. Savage, and agreed with him in his views, which he thought not only original, but of the utmost practical importance. The fibro-elastic erectile ring at the commencement of the vagina, he felt inclined to contrast with the prostate in the male, and thought that between them there were strikingly interesting analogies. The curious erectile venous body, described as the bulb of the ovary, was quite new to him; but a similar body (Dr. Savage's bulb of the vagina) had been described by Kobelt much in the same way, except, perhaps, as to its fibrous investment, which he agreed with Dr. Savage in regarding as endowing it with elastic characters.

Mr. I. B. BROWN considered Dr. Savage's anatomical expo-

sitions of that most embarrassing class of pelvic tumours, which are not to be accounted for on ordinary and accepted grounds, highly important and satisfactory. Those accustomed like himself to the treatment of diseases of females, would feel with him how much the obscurity and doubt attending investigation of the pelvic tumour alluded to would be cleared away by the novel and excellent practical deductions in Dr. Savage's paper.

Mr. CANTON said the course pursued by Dr. Savage was one he delighted to see followed in all inquiries relating to the art of medicine. First, there was a searching anatomical investigation; secondly, rigorously practical and legitimate deduction; thirdly, the application of principles thus elicited to the elucidation of disease. The reasons given for the more frequent occurrence of "utero-ovarian" varicocele on the left side, and œdema of the left limb, he quite agreed in. The functions attributed to the "bulb of the ovary"—indeed, that part of the paper altogether—was new to him. As to the homologies mentioned by Mr. Nunn between Dr. Savage's fibro-elastic vaginal ring and the prostate, he felt sure that such analogies applied with far greater propriety between the prostate and uterus. Mr. Canton entered into some details in support of this view, in contrast with that adopted by Mr. Nunn.

The PRESIDENT related a case of traumatic hæmorrhage strikingly corroborative of Dr. Savage's account of the vascular distribution in the female perinæum, and observed that the source of the extremely obstinate hæmorrhage from the small punctured wound found a ready explanation in one of the plates Dr. Savage had brought to illustrate his paper. As regards the function Dr. Savage attributed to the bulb of the ovary, admitting its originality, he was not disposed exactly to concur in it. The Fallopian tube was muscular, and he thought quite equal to the task generally assigned to it without the aid of the erectile bulb. This was an opinion in no way to the disparagement of the paper, which he considered a most valuable one.

Dr. SAVAGE explained, that the paper was intended as an anatomical exposition of certain diseases of females depending on the venous peculiarities of the female pelvis, and, therefore, he would rapidly pass over the subject of homologies, highly interesting as he knew they were, since their discussion was foreign to the object of the paper. Mr. Nunn had mentioned Kobelt's previous description of the bulb of the vagina; but this body was known and described two hundred years ago. He (Dr. Savage) had brought it with the other venous bodies, not before described, into what he ventured to call the erectile system of the female. He had freely entered into his reasons for regarding such tumours as pelvic hematoceles, pelvic varicoceles, labial thrombus, and certain forms of perineal hæmatoceles, leading to inflammation of the adventitious cyst, and a form of menorrhagia—draining menorrhagia—as connected with the venous and erectile pelvic system of the female; and he was much pleased to find others so entirely agreed with him on those points. The President seemed to undervalue the utility of the ovarian belt, which he said he thought was not wanted for the purpose named in the paper. But there it was, and what other function could be given to it? The President had also said that the figure-of-8 arrangement of fibres of continuation between the constrictor vaginæ and sphincter of the rectum was seen only in old books of anatomy. It was precisely in this that the old books were correct. The drawings then in the room were exactly copied from Nature, and showed the same thing. The action of the muscle was the most interesting point to surgeons, and this afforded additional reasons for comparing it with the muscles of the bulb in the male.

Editor's Letter Box.

SACCHARINE DIET IN DIABETES.

LETTER FROM THOMAS WILLIAMS, M.D.

SIR,—My attention has been called, by a mutual friend of Dr. Budd and myself, to certain points in the original paper of Dr. Budd on the proposed use of sugar in diabetes.

At the moment when I drew up the short paper which appeared in the last number of your JOURNAL, I had not the opportunity of reperusing Dr. Budd's observations; I therefore drew upon what I believed to be correct impressions. On referring again to his communication, I find that his proposal refers to *cane-sugar*, excluding every article of diet which contains starch in any of its forms, or such principles as are capable of being converted into glucose or diabetic sugar. Although the facts stated in my last communication are of great value, without reference to theory, I am most anxious to repair the injury which I have, by my misconception, done to Dr. Budd; and promise, in a short time, to publish the results arrived at by the exclusive use of *cane-sugar*.

I am, etc., THOMAS WILLIAMS.

Swansea, December, 1857.

SPLINTS IN RESECTION OF THE KNEE-JOINT.

SIR,—I feel it a duty incumbent on us all, as members of an honourable profession, to expose and hold up to well merited contempt those members of it who endeavour systematically to make or improve their position by a detraction of their neighbours. I also feel it a kindness we owe to a friend to remind him of his duty when we see him appropriating to himself the merit of an invention which belongs to another, especially when, as in the present case, his well known modesty of character assures us that thoughtlessness alone can have allowed the merit due to a friend to be in every way unrecognised.

The case to which I allude is that of Mr. P. C. Price, whose communications on excision of the knee-joint, with its after-treatment, have at various times appeared in the medical journals. He recommends the use of a peculiar splint, and enters so fully into its merits that, in his enthusiasm for the apparatus, he forgets its inventor. I will endeavour to supply the omission.

In the winter session of 1855-56, Mr. George Parkinson, now of Grosvenor Street, then house-surgeon to King's College Hospital, invented, and used with marked success, the splint in question. Mr. Price, a friend of Mr. Parkinson, was known at that time to express those opinions of it which usually fall at first to the lot of new contrivances. However, seeing afterwards its great practical utility, Mr. Price, who was a well known advocate among his contemporaries at King's College Hospital of the practical *versus* the scientific surgeon, adopted the splint, and, from his description and advocacy of it, gave an impression, which I know he will feel obliged to me for removing, that he, and not Mr. Parkinson, was the inventor of this apparatus, to the great practical utility of which I can add the testimony of personal experience. I am, etc.,

AN ASSOCIATE OF KING'S COLLEGE, LONDON.

December 29th, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

CADDY. On December 27th, 1857, at Abbey Farm Lodge, Hampstead, the wife of Dr. Caddy, R.N., of a son.

CLAREMONT. On December 28th, 1857, at 1, Thorney Place, Camden Town, the wife of C. C. Claremont, Esq., Surgeon, of a son.

M'CULLOCH. On December 17th, at Heathland Lodge, Hampstead, the wife of George M'Culloch, M.D., of a daughter.

RICHARDSON. On December 26th, at 12, Hinde Street, Manchester Square, the wife of *Benjamin W. Richardson, M.D., of a son, stillborn.

SHAW. On December 22nd, at 25, Henrietta Street, Cavendish Square, the wife of Alexander Shaw, Esq., Surgeon, of a son.

MARRIAGES.

DICK—BLAKEY. DICK, Robert, M.D., to Hannah, eldest daughter of W. Blakey, Esq., of Rochester, at St. Barnabas, Kensington, on December 23rd.

FRANZ—ATKINSON. FRANZ, John C. A., M.D., of Brighton, to Caroline, eldest daughter of the late James Atkinson, Esq., of Russell Square, at Trinity Church, Westbourne Terrace, on December 23rd.

DEATHS.

BAKER, James, Esq., Surgeon, at Staines, aged 56, on December 22nd, 1857.

BAUDENS. M., Inspector of Health to the French Army, and formerly professor at the Val-de-Grace, on December 27th. The cause of M. Baudens' death is stated to have been a disease contracted during the performance of his duties in the Crimea, during the war with Russia.

BRYANT. On December 19th, at Suffolk Villa, near Clifton, Rebecca, wife of John Berry Bryant, Esq., Surgeon to the 4th Middlesex Regiment.

HAWES, William H. B., Esq., Surgeon, on December 16th.

LODGE. On December 26th, aged 8 years, of scarlet fever, Aneurin Thomas, only son of *Llewelyn Lodge, Esq., Surgeon, St. Asaph, Flintshire.

SHAW. On December 28th, at Henrietta Street, Cavendish Square, Alexander John, infant son of Alexander Shaw, Esq., Surgeon.

WARD. On December 14th, at 14, Clapham Rise, aged 66, Charlotte Elizabeth, wife of N. B. Ward, Esq.

APPOINTMENTS.

*RICHARDSON, Benjamin W., M.D., elected a Honorary Member of the Literary and Philosophical Society of St. Andrews, and a Corresponding Member of the Society for Scientific Medicine in Berlin.

PASS LISTS.

APOTHECARIES' HALL. Members admitted on Thursday, December 24th, 1857:—

BRUNTON, William Riddell, East Indies
DIVER, Thomas, Hampstead
EDMONDS, Shirley, Woolmer
EDWARDS, William Watkin, Keston
HARRISON, John, Gibraltar
KEENE, Alfred William, Guildford, Surrey
PAGE, Edward Arthur, Bedworth, Warwick
PARKINSON, George, Grosvenor Street
UTERMARCK, George, Guernsey
WHITE, George Farr, Park Terrace, Regent's Park

HEALTH OF LONDON:—WEEK ENDING DECEMBER 26TH, 1857.

[*From the Registrar-General's Report.*]

THE deaths registered in London, which in the previous week were 1234, declined in the week that ended last Saturday (December 26th) to 1013. In the ten years 1847-56 the average number of deaths in the weeks corresponding with last week was 1227. But as the deaths of last week occurred in an increased population, the average with a view to comparison, must be raised proportionally to the increase, in which case it will become 1350. Hence it appears that the public health was so far improved, that the deaths were less by about 300 than the number which the average rate of mortality at the close of the year would have produced.

The deaths caused by diseases of the organs of respiration were last week 246, whilst the average corrected for increase of population is 271. The decrease in the numbers assigned to this general head (which does not include phthisis) is shown by the results of the last four weeks, which were successively 415, 336, 298, and 246. Considerably more than half of these 246 deaths arose from bronchitis, which carried off 140 persons, of whom 55 were 60 years old and upwards. The fatal cases of pneumonia (inflammation of the lungs) were, last week, 83, which is decidedly below the corrected average for corresponding weeks. Of this number 57 occurred to children during the first two years of life. Of persons who died from phthisis in the last two weeks the numbers were 161 and 115. Of deaths arising from zymotic complaints, only one is referred to small-pox, 30 (which is much less than usual) to typhus and common fever, the same number to scarlatina, 37 to hooping-cough, 9 to croup, 41 to measles. Seventeen, or nearly half of the deaths from measles, occurred in the Eastern division of the metropolis; 4 in the sub-district of St. Paul (St. George-in-the-East), 4 in Mile-end Old Town, 3 in Poplar. The Registrar of St. Mary in St. George-in-the-East registered 2 deaths from measles at Nos. 1 and 2 Sarah's-place; and he adds that eight deaths from this disease have occurred within a short period in the neighbourhood, and that many other severe cases have occurred though without fatal results. The single case of small-pox, mentioned above, occurred to a dressmaker, aged 37, at 4, Devonshire-street, Christchurch, Marylebone, in which house three cases, though not all terminating fatally, have occurred recently. A figure-maker died of painter's colic and hæmorrhage. Of four nonagenarians, three men and a woman, who died in the week, the oldest was 94 years of age, and died in the Workhouse, Borough-road.

Last week the births of 769 boys and 730 girls, in all 1499 children, were registered in London. In the ten corresponding weeks of the years 1847-56 the average number was 1410.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·083 in. The mean daily reading was above 30 in. on the last five days. The *highest* reading occurred on Thursday, and was 30·30 in. The mean temperature of the week was 47·1°, which is 9·6° above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was above the average throughout the week, and on Monday and three following days the excess was from 10° to 14°. The greatest daily range of temperature occurred on Sunday (the 20th), and was 17·8°; the least on Thursday, when it was 5·5°. The mean daily range of the week was 10·4°. The difference between the mean air temperature and mean dew point temperature was 3·6°. The mean temperature of the water of the Thames was 46·6°. The mean degree of humidity of the air was 86, complete saturation being represented by 100. The humidity fell from 93 on Sunday to 78 on Wednesday. The wind blew from a south-westerly point. Rain fell to the amount of 0·10 in. on Sunday; none was measured during the rest of the week. Wednesday was very warm for the season, and on Christmas day the weather was unusually fine.

SALE OF POISONS BY CHILDREN.

AT the Thames Police Office, on Monday last, James Thomas Worley, a shoemaker, aged 24 years, residing at No. 92, Fore-street, Cripplegate, was charged with attempting to commit self-destruction by swallowing a quantity of oxalic acid.

George Ifield, a police constable, No. 158 K, stated that on Saturday evening, at half-past 8 o'clock, he was called to the prisoner, who was in Bull-lane, Stepney, supported by a young man, and apparently in great pain. He took a paper from the prisoner's hand, on which were printed the words "oxalic acid—poison." He took the prisoner to the surgery of Mr. Orton, in White Horse-street, Stepney, who gave him an antidote, and the prisoner was then removed to Mile-end Old Town Workhouse, where he had since remained under medical treatment. When he first took the prisoner into custody he admitted that he had swallowed poison, and said he hoped it would kill him.

Mr. SELFE. Who supplied him with the poison?

Ifield replied that a boy nine years of age bought the poison of another boy of the same age.

Mr. SELFE. Children dealing in poison! How is that?

Edmund John Cross, a boy aged nine years, stated that he went by the direction of the prisoner to the shop of Mr. Hutchins, chemist, in the Old-road, Stepney, on Saturday, for a pennyworth of oxalic acid. A boy served him with it.

Mr. SELFE. Did the boy ask you what it was for?

Witness. Yes, sir, and I told him it was to stain boots. He gave it to me over the counter. The prisoner is my cousin.

Mr. SELFE. Did you see the prisoner dissolve the oxalic acid in water, and swallow it?

Witness. I saw him "scrunch it", and then put it in his mouth in small pieces and swallow it.

George Foster, a boy about the same age as last witness, said that he sold the poison, and he said it was to finish off boots. He knew the boy Cross before, and he had come to him with a bad arm.

Mr. SELFE. You had better not sell poisons to any one again. Does your master allow you to sell poisons and to prescribe for persons with bad arms?

Witness. Not as I knows of, sir.

Mr. SELFE. Don't you sell poisons again.

Mr. Hutchins, the master of the boy Foster, said he did not allow him to sell medicines of any description, or to prescribe for patients at any time. [*Laughter.*]

Mr. SELFE. A boy not ten years of age ought not to be allowed to be in a shop where there are poisons.

Mr. Hutchins. It was very wrong in the boy to sell oxalic acid or anything. He did it early in the morning, before I came down stairs.

Mr. SELFE. I hope you will not allow him to sell anything again in the shop. I repeat it is not safe for him to sell anything where there are poisons.

Mr. Hutchins. I will take care nothing of the kind occurs again. The prisoner did not take enough to destroy life. He took about a drachm, and he vomited directly, which saved him.

Mr. SELFE remarked that the prisoner could be committed for trial and severely punished for attempting the crime of self-murder; but in consideration of the punishment he had already undergone, his contrition, and his promise not to renew the attempt, he would permit him to be discharged.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

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To CONTRIBUTORS. The Editor would feel glad if Members of the Association and others, would cooperate with him in establishing as a rule, that in future no paper for publication shall exceed two pages of the Journal in length. If the writers of long communications knew as well as the Editor does, that lengthy papers *always* deter the reader from commencing them, this great evil would never arise. Brevity is the soul of medical writing—still more than of wit.

ANONYMOUS CORRESPONDENTS should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

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Communications have been received from: —DR. T. WILLIAMS; DR. SOUTHAM; MR. SOUTHAM; DR. HUMPHRY SANDWITH; MR. J. H. HOUGHTON; DR. DAY; DR. HAYES JACKSON; MR. PEMBERTON; MR. BOOTH EDDISON; DR. C. W. GRAHAM; MR. LL. LODGE; MR. T. P. SMITH; DR. P. H. WILLIAMS; MR. O. PEMBERTON; DR. H. VERNON; DR. G. G. ROGERS; and DR. BURD.

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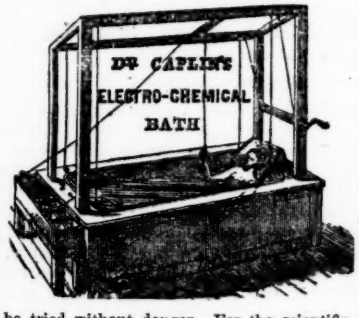

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